

# ***Grizzly*** ***Industrial, Inc.***®

## **MODEL G0733** **18" X 47" WOOD LATHE** **OWNER'S MANUAL** *(For models manufactured since 10/11)*



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#KN14454 PRINTED IN CHINA



## **WARNING!**

**This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.**

**Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.**

**The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**



## **WARNING!**

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.**

# Table of Contents

<b>INTRODUCTION</b> .....	<b>2</b>	Installing/Removing Tailstock Center .....	24
Manual Accuracy .....	2	Installing the Tailstock Center .....	24
Contact Info.....	2	Removing the Headstock Center .....	24
Machine Description .....	2	Installing Faceplate.....	25
Identification.....	3	Changing Speed Ranges.....	25
Glossary Of Terms.....	4	Indexing .....	27
Machine Data Sheet .....	5	Spindle Turning.....	27
<b>SECTION 1: SAFETY</b> .....	<b>7</b>	Spindle Turning Tips: .....	29
Safety Instructions for Machinery .....	7	Faceplate Turning.....	29
Additional Safety for Wood Lathes .....	9	Mounting the Workpiece onto the Faceplate.....	29
<b>SECTION 2: POWER SUPPLY</b> .....	<b>10</b>	Mounting Workpiece to Backing Block.....	30
Availability.....	10	Outboard Turning.....	30
Full-Load Current Rating .....	10	Sanding/Finishing .....	31
Circuit Information .....	10	Selecting Turning Tools .....	32
Circuit Requirements for 220V .....	10	<b>SECTION 5: ACCESSORIES</b> .....	<b>33</b>
Grounding Requirements .....	11	Recommended Metal Protectants .....	35
Extension Cords .....	11	<b>SECTION 6: MAINTENANCE</b> .....	<b>36</b>
<b>SECTION 3: SETUP</b> .....	<b>12</b>	Schedule .....	36
Needed for Setup.....	12	Cleaning.....	36
Unpacking .....	12	Lathe Bed.....	36
Inventory .....	13	Lubrication .....	36
Site Considerations.....	14	<b>SECTION 7: SERVICE</b> .....	<b>37</b>
Cleanup.....	15	Troubleshooting .....	37
Mounting .....	15	Motor & Electrical .....	37
Bolting to Concrete Floors.....	15	Wood Lathe Operation .....	38
Assembly .....	16	Changing Belt .....	39
Power Connection.....	17	<b>SECTION 8: WIRING</b> .....	<b>40</b>
Connecting Power .....	17	Wiring Safety Instructions .....	40
Disconnecting Power.....	17	Wiring Diagram .....	41
Test Run .....	18	Wiring Components .....	42
<b>SECTION 4: OPERATIONS</b> .....	<b>19</b>	<b>SECTION 9: PARTS</b> .....	<b>43</b>
Operation Overview .....	19	Stand & Bed Parts Breakdown .....	43
Basic Controls.....	20	Headstock Parts Breakdown .....	44
Stock Inspection & Requirements.....	21	Label Placement .....	46
Adjusting Headstock .....	21	<b>WARRANTY AND RETURNS</b> .....	<b>49</b>
Adjusting Tailstock.....	22		
Adjusting Tool Rest.....	22		
Installing/Removing Headstock Center.....	23		
Installing the Headstock Center .....	23		
Removing the Headstock Center .....	23		


# INTRODUCTION

## Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.

		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:		<b>Manufacture Date of Your Machine</b> ing this machine: operation. s and respirator. sted/setup and suit before starting.	
Specification:			
Specification:			
Specification:			
Weight:			
	Date	4. make sure the motor has stopped and disconnect power before adjustments, maintenance, or service.	
	Serial Number	5. DO NOT expose to rain or dampness.	
Manufactured for Grizzly in Taiwan		6. DO NOT modify this machine in any way.	
		7. DO NOT remove safety guards.	
		8. Never leave machine running unattended.	
		9. DO NOT operate under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	

For your convenience, we post all available manuals and manual updates for free on our website at [www.grizzly.com](http://www.grizzly.com). Any updates to your model of machine will be reflected in these documents as soon as they are complete.

## Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support  
1203 Lycoming Mall Circle  
Muncy, PA 17756  
Phone: (570) 546-9663  
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager  
P.O. Box 2069  
Bellingham, WA 98227-2069  
Email: manuals@grizzly.com

## Machine Description

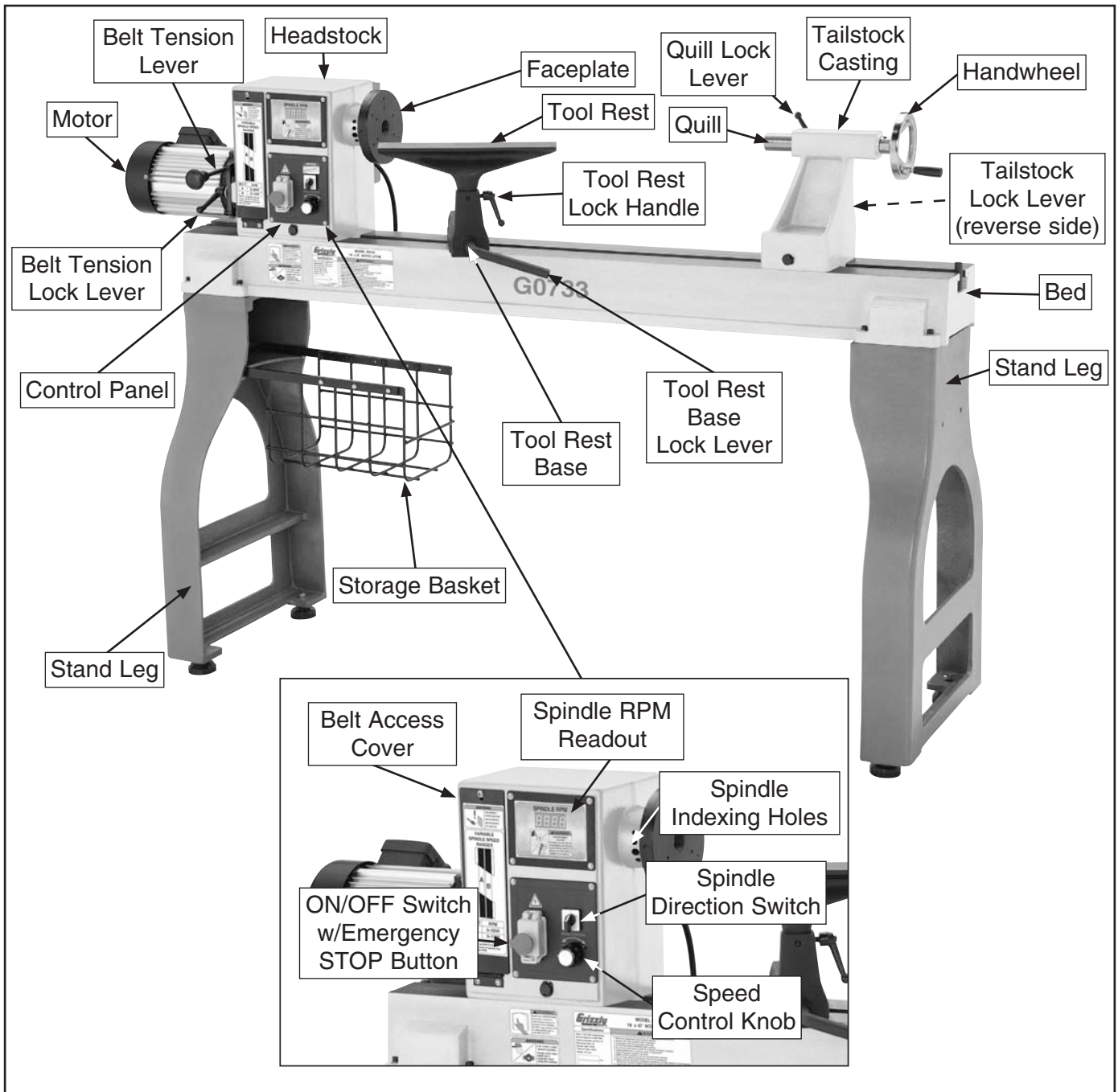
The G0733 18" X 47" Wood Lathe is designed to turn wood stock so the operator can remove material with a chisel.

The variable speed control allows for infinite spindle speed adjustment from 0–3200 RPM and the digital readout provides a precise reading of the current spindle speed.

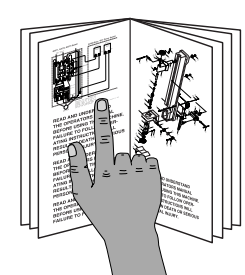
The headstock can be positioned anywhere along the bed for increased flexibility in workpiece setup.



# Identification



**Figure 1.** Model G0733 parts and component identification.



**⚠ WARNING**

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.



# Glossary Of Terms

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The following is a list of common definitions, terms and phrases used throughout this manual as they relate to this wood lathe and turning in general. Become familiar with these terms for assembling, adjusting or operating this machine. Your safety is **VERY** important to us at Grizzly!

**Bed:** The long, rail-like metal base to which the tailstock, tool base, and headstock are attached.

**Chuck:** A mechanical device that attaches to the spindle and holds the workpiece.

**Faceplate:** The metal disc that threads onto the headstock spindle.

**Faceplate Turning:** Turning situation in which the grain of the turning stock is at right angles to the lathe bed axis.

**Backing Block:** A sacrificial piece of wood glued to the base of the workpiece and screwed to the faceplate. Often used to prevent mounting marks from appearing on the completed workpiece.

**Headstock:** The cast metal box to which the motor is attached and contains the spindle, bearings, belts, and electrical components for operating the lathe.

**Index head:** The mechanism that allows the headstock spindle to be locked at specific intervals for layout or other auxiliary tasks.

**Offset Turning:** A turning situation where the center of the workpiece is offset at various stages of the work to produce different shapes.

**Outboard Turning:** Turning of workpiece with the headstock situated at the far end of the lathe so the work done is not over the bed of the lathe.

**Roughing Out:** Taking stock from square billet to round blank.

**Spindle:** This term has two meanings. First, it refers to the threaded shaft in the headstock to which the faceplate is attached. Second, it refers to any work that is spindle-turned.

**Spindle-Turning:** Work performed where the grain and length of the workpiece are parallel to the axis of the bed.

**Swing:** The capacity of the lathe, measured by doubling the distance from the bed to the spindle center.

**Tailstock:** The metal component at the opposite end of the bed from the headstock containing a quill and live or dead centers. It maintains pressure on the spindle-turned workpiece.

**Tool Base:** The movable metal fixture attached to the bed upon which the tool rest is fixed.

**Tool Rest:** The adjustable metal arm upon which the tool rest during a turning operation.

**Way:** One of the metal rails that make up the bed of the lathe.





# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0733 HEAVY DUTY WOOD LATHE 18" X 47"

### Product Dimensions:

Weight..... 419 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 80-3/4 x 19-1/16 x 48-1/16 in.  
 Footprint (Length x Width)..... 65-1/2 x 20 in.

### Shipping Dimensions:

Type..... Wood Crate  
 Content..... Machine  
 Weight..... 547 lbs.  
 Length x Width x Height..... 68 x 22 x 23 in.

### Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz  
 Full-Load Current Rating..... 12.6A  
 Minimum Circuit Size..... 15A  
 Inverter Type..... Delta VFD015M2  
 Switch..... Push Button ON/OFF, Variable Speed Dial  
 Switch Voltage..... 220V  
 Cord Length..... 9.8 ft.  
 Cord Gauge..... 14 AWG  
 Plug Included..... Yes  
 Included Plug Type..... NEMA 6-15

### Motors:

#### Spindle

Type..... TEFC Induction  
 Horsepower..... 2 HP  
 Voltage..... 220V  
 Phase..... 3-Phase  
 Amps..... 5.3A  
 Speed..... 0 – 3560 RPM  
 Cycle..... 60 Hz  
 Number of Speeds..... Variable  
 Power Transfer ..... Belt Drive  
 Bearings..... Shielded and Permanently Sealed

### Main Specifications:

#### Operation Information

Swing Over Bed..... 18 in.  
 Dist Between Centers..... 47 in.  
 Swing Over Tool Rest..... 13-3/4 in.  
 No of Spindle Speeds..... Variable  
 Spindle Speeds..... Low 100–1200; High 330–3200 RPM  
 Floor to Center Height..... 44-7/8 in.  
 Headstock Rotation..... 0–180 deg.



**Spindle Information**

Spindle Taper..... MT#2  
Spindle Size..... 1-1/4 x 8 (RH) TPI in.  
Spindle Bore..... 0.393 in.  
Spindle Center..... Spur Center  
Indexed Spindle..... 10, 30 deg.  
No of Indexes..... 4

**Tailstock Information**

Tailstock Taper..... MT#2  
Tailstock Center..... Live

**Construction**

Bed..... Precision-ground Cast Iron  
Frame..... Cast Iron  
Stand..... Cast Iron  
Base..... Cast Iron  
Headstock..... Cast Iron  
Tailstock..... Cast Iron  
Paint..... Powder Coated

**Other Related Information**

Faceplate Size..... 6 in.

**Other Specifications:**

Country Of Origin ..... China  
Warranty ..... 1 Year  
Serial Number Location ..... Machine ID Label on Front of Bed  
Assembly Time ..... 1 Hour

**Features:**

- 14" wide tool rest (with post size of 2-1/4"H x 1"Ø)
- 16" swing over tool rest base
- Electronic variable speed control with digital spindle speed indicator
- Belt drive offers low speed range of 100–1200 RPM and a high speed range of 330–3200 RPM
- Headstock can be rotated 180° and positioned anywhere along the bed
- Single-phase frequency drive provides three-phase variable speed control without three-phase power
- 10° indexing using all three indexing holes
- 30° direct indexing using 1 indexing hole
- Tailstock, headstock, and tool rest support have lever action cam locks for quick positioning
- Emergency stop switch
- Forward/reverse switch

**Accessories Included:**

- Spur center
- Cupped live center
- Knock-out tool
- Tool rest
- 6" Faceplate
- Indexing pin
- Hex wrenches





# SECTION 1: SAFETY

## WARNING

### For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

### **NOTICE**

This symbol is used to alert the user to useful information about proper operation of the machine.

## WARNING

### Safety Instructions for Machinery

**OWNER'S MANUAL.** Read and understand this owner's manual **BEFORE** using machine. Untrained users can be seriously hurt.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

**HAZARDOUS DUST.** Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

**WEARING PROPER APPAREL.** Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**MENTAL ALERTNESS.** Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



# WARNING

**DISCONNECTING POWER SUPPLY.** Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

**APPROVED OPERATION.** Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in dark areas. Keep work area clean, dry, and well-lighted.

**ONLY USE AS INTENDED.** Only use machine for its intended purpose. Never modify machine for a purpose not intended by the manufacturer!

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

**REMOVE ADJUSTING TOOLS.** Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

**SECURING WORKPIECE.** When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

**FEED DIRECTION.** Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**GUARDS & COVERS.** Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

**NEVER STAND ON MACHINE.** Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

**STABLE MACHINE.** Unexpected movement during operations greatly increases risk of injury or loss of control. Before starting, verify machines are stable and mobile base (if used) is locked.

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**UNATTENDED OPERATION.** Never leave machine running while unattended. Turn machine **OFF** and ensure all moving parts completely stop before walking away.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine increases risk of injury.

**CHECK DAMAGED PARTS.** Regularly inspect machine for damaged parts, loose bolts, mis-adjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

**MAINTAIN POWER CORDS.** When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

**EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



# WARNING

## Additional Safety for Wood Lathes

**KEEPING GUARDS IN PLACE.** Make sure all guards are in place and that the lathe sits on a flat, stable surface.

**EYE/FACE PROTECTION.** Airborne wood dust and debris can be hazardous to the eyes/face and may cause allergies or long-term respiratory health problems. Always wear eye protection or a face shield when operating the lathe.

**RESPIRATORY PROTECTION.** Always wear a respirator when using this machine. Wood dust may cause allergies or long-term respiratory health problems.

**MOUNTING WORKPIECE.** Before starting, be certain the workpiece has been properly imbedded on the headstock and tailstock centers and that there is adequate clearance for the full rotation.

**ADJUSTING TOOL REST.** Adjust tool rest to provide proper support for the turning tool you will be using. Test tool rest clearance by rotating workpiece by hand before turning lathe **ON**.

**TURNING SPEED.** Select the correct turning speed for your work, and allow the lathe to gain full speed before using.

**USING SHARP CHISELS.** Keep lathe chisels properly sharpened and held firmly in position when turning.

**OPERATING DAMAGED LATHE.** Never operate the lathe with damaged or worn parts.

**WORKPIECE CONDITION.** Always inspect the condition of your workpiece. **DO NOT** turn pieces with knots, splits, and other potentially dangerous conditions. Make sure joints of glued-up pieces have high quality bonds and won't fly apart during operation.

**ADJUSTMENTS/MAINTENANCE.** Make sure your wood lathe is turned **OFF**, disconnected from its power source, and all moving parts have come to a complete stop before starting any inspection, adjustment, or maintenance procedure.

**STOPPING LATHE.** **DO NOT** stop the lathe by using your hand against the workpiece. Allow the lathe to stop on its own.

**AVOIDING ENTANGLEMENT.** Keep long hair and loose clothing articles such as sleeves, belts, and jewelry items away from the lathe spindle.

**FACEPLATE TURNING.** When faceplate turning, make sure the faceplate is securely attached to the workpiece and it is properly attached to the spindle. When faceplate turning, use lathe chisels on the downward spinning side of the workpiece only.

**SANDING/POLISHING.** Remove the tool rest when performing sanding or polishing operations on the rotating spindle.

**MATERIAL REMOVAL RATE.** Attempting to remove too much material at once may cause workpiece to fly out of the lathe.

# WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

# CAUTION

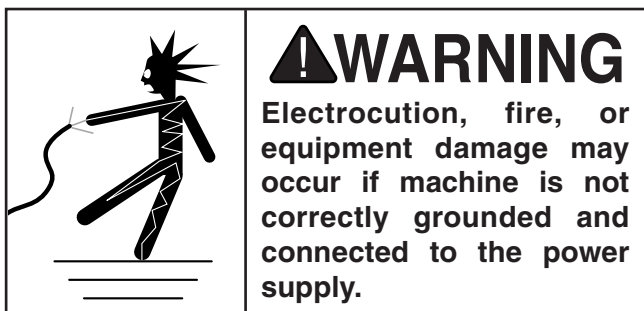
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



# SECTION 2: POWER SUPPLY

## Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by a qualified electrician in accordance with all applicable codes and standards.



## Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

### Full-Load Current Rating at 220V .. 12.6 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements in the following section.

## Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

**! CAUTION**  
For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

**Note:** *The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult a qualified electrician to ensure that the circuit is properly sized for safe operation.*

## Circuit Requirements for 220V

This machine can be converted to operate on a 220V power supply (refer to **Voltage Conversion** instructions). This power supply must have a verified ground and meet the following requirements:

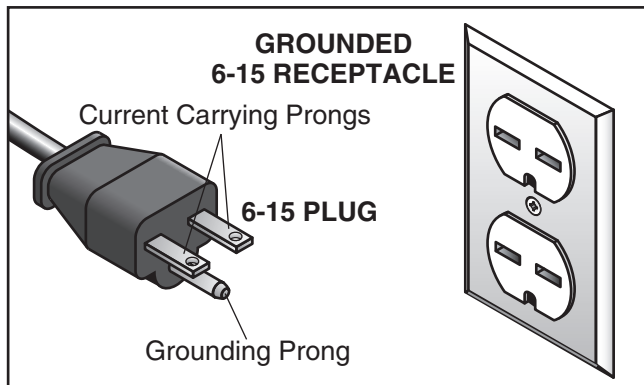
- Nominal Voltage ..... 220V/240V
- Cycle ..... 60 Hz
- Phase ..... Single-Phase
- Power Supply Circuit ..... 15 Amps
- Plug/Receptacle ..... NEMA 6-15



## Grounding Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

**For 220V operation:** This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (see following figure). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.



**Figure 2.** Typical 6-15 plug and receptacle.

**⚠ CAUTION**

A diagram showing a 6-15 plug being inserted into a different type of receptacle, with a large 'X' over it to indicate this is prohibited.

**No adapter should be used with the required plug. If the plug does not fit the available receptacle, or the machine must be reconnected for use on a different type of circuit, the reconnection must be made by a qualified electrician and comply with all local codes and ordinances.**

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

## Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

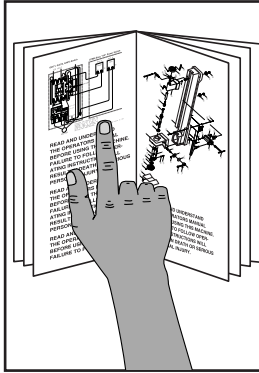
Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

- Minimum Gauge Size .....14 AWG**
- Maximum Length (Shorter is Better).....50 ft.**

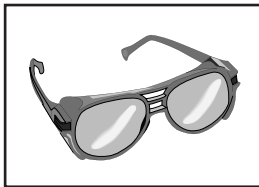


# SECTION 3: SETUP



## **!WARNING**

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



## **!WARNING**

Wear safety glasses during the entire setup process!



## **!WARNING**

The G0733 and its components are very heavy. Get lifting help or use power lifting equipment such as a fork lift to move heavy items.

## Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

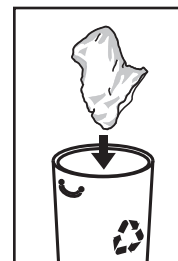
Description	Qty
• Safety Glasses .....	1
• Cleaner/Degreaser .....	As Needed
• Disposable Shop Rag .....	As Needed
• Additional People .....	As Needed
• Level .....	1

## Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, *please call us immediately at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



## **!WARNING**

### **SUFFOCATION HAZARD!**

Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.



# Inventory

After all the parts have been removed from the shipping containers, you should have the following items:

Inventory: (Figures 3–6)	Qty
<b>A.</b> Lathe Assembly	
—Headstock (mounted) .....	1
—Tool Rest Base (mounted) .....	1
—Tailstock (mounted) .....	1
—Faceplate 6" (installed) .....	1
<b>B.</b> Stand Legs .....	2
<b>C.</b> Machine Feet.....	4
<b>D.</b> Tool Rest .....	1
<b>E.</b> Live Center MT#2 .....	1
<b>F.</b> Spur Center MT#2 .....	1
<b>G.</b> Indexing Pin.....	1
<b>H.</b> Hex Wrenches 3, 4, 6, 8mm.....	1 Ea
<b>I.</b> Knockout Tool.....	1
<b>J.</b> Storage Basket.....	1
<b>K.</b> Hardware (not shown)	
—Cap Screws M8-1.25 x 35 .....	10
—Lock Washers 8mm.....	10
—Hex Nuts M8-1.25.....	2

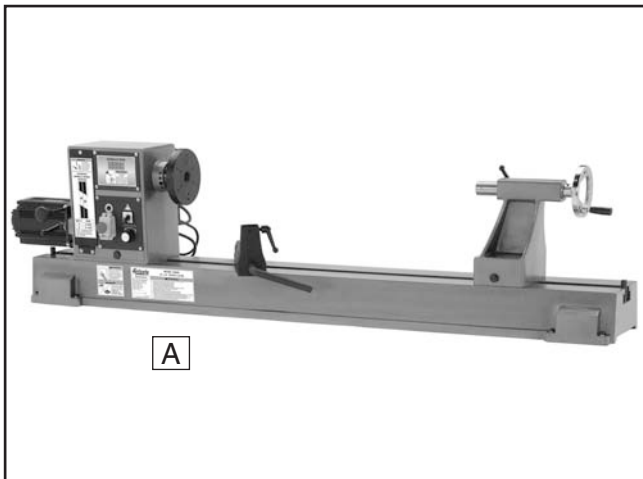


Figure 3. Lathe assembly.

## NOTICE

Some hardware/fasteners on the inventory list may arrive pre-installed. Check mounting locations before assuming that any items from the inventory list are missing.

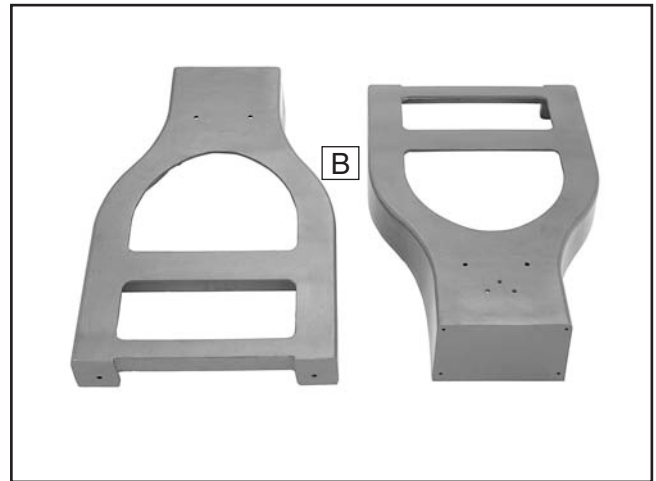


Figure 4. Stand legs.

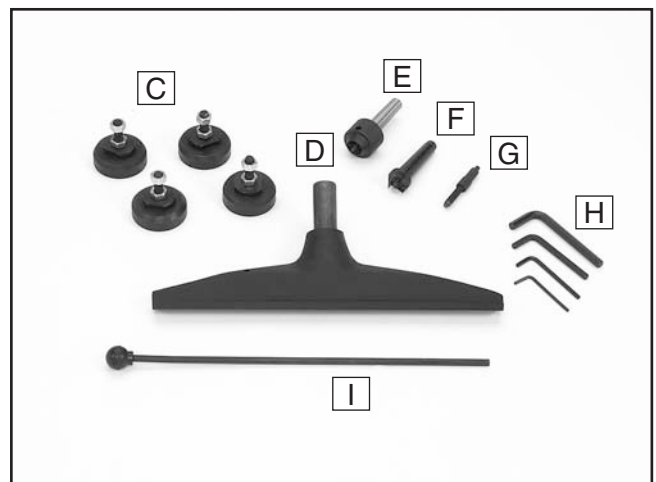


Figure 5. Loose inventory components.

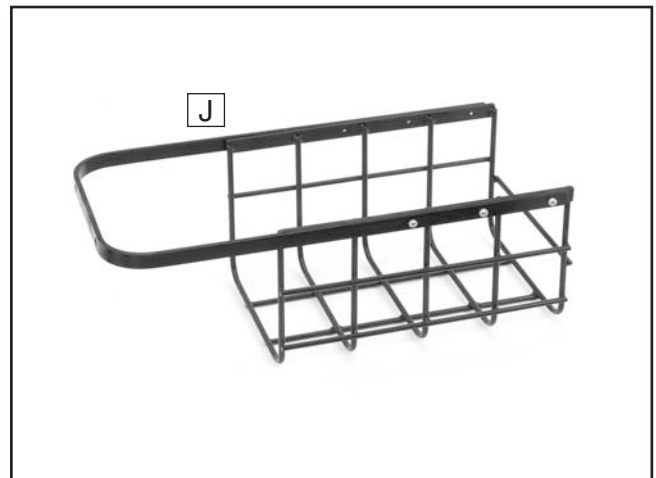


Figure 6. Storage basket.

If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.



# Site Considerations

## Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

## Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



## Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

## Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device, if required.

## Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

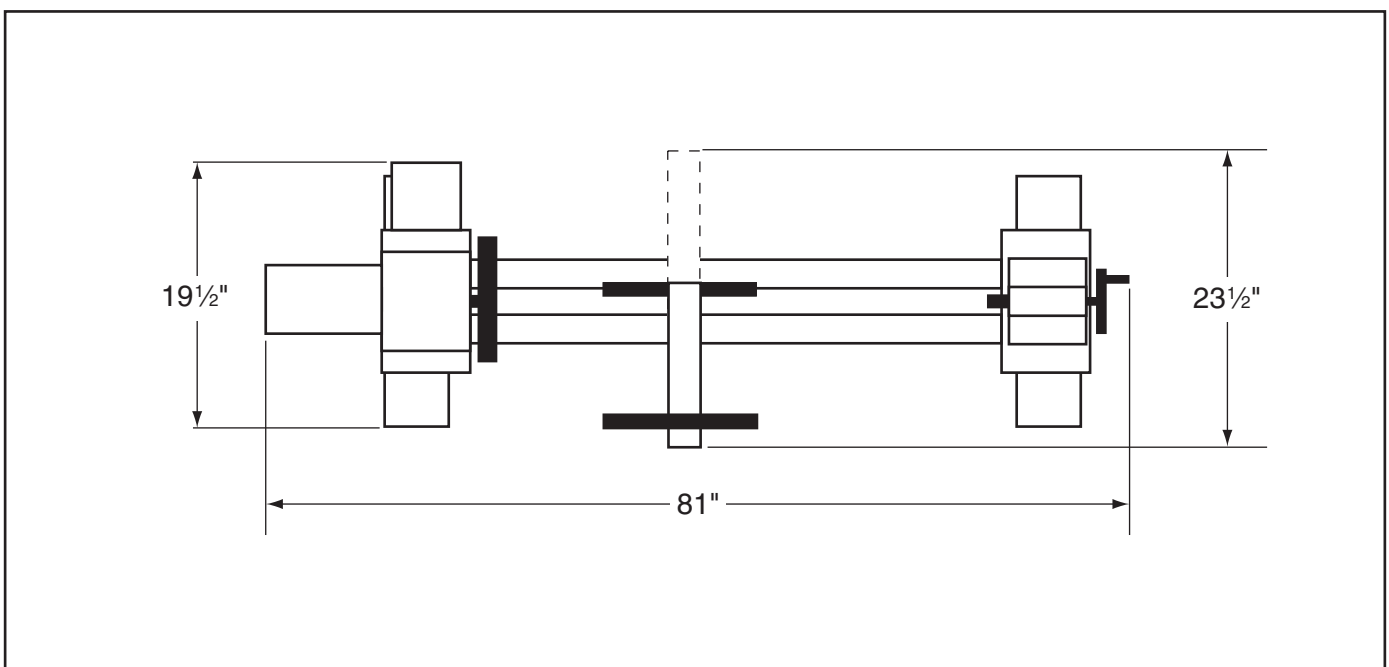


Figure 7. Minimum working clearances.





# Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

## Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

## Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

## **NOTICE**

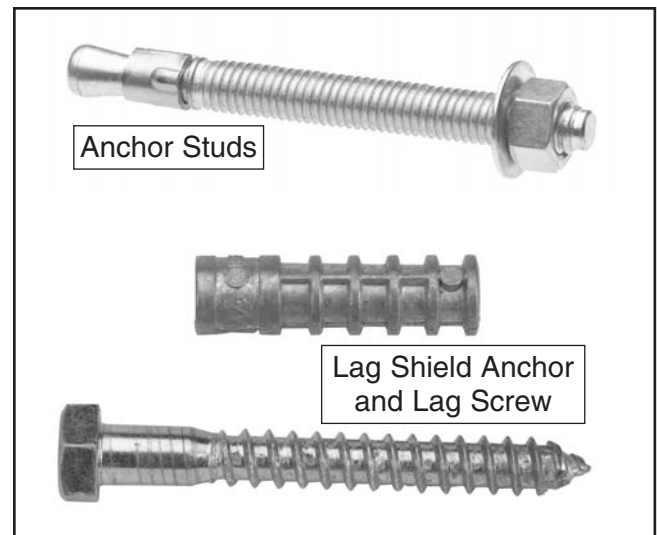
**Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.**

# Mounting

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. Generally, you can either bolt your machine to the floor or mount it on machine mounts. Both options are described below. Whichever option you choose, we recommend leveling your machine with a precision level.

## Bolting to Concrete Floors

Lag shield anchors with lag screw and anchor studs, as shown in **Figure 8**, are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.



**Figure 8.** Typical fasteners for mounting to concrete floors.

## **NOTICE**

**Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.**

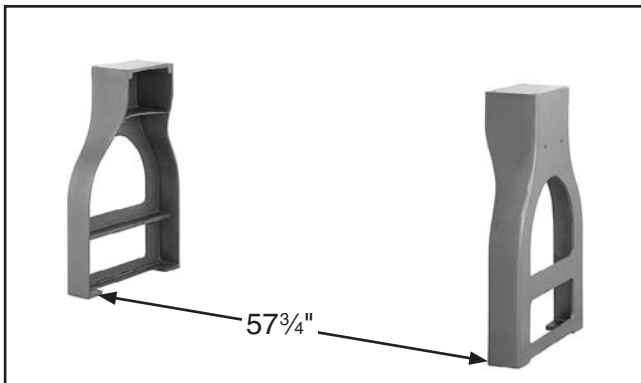


# Assembly



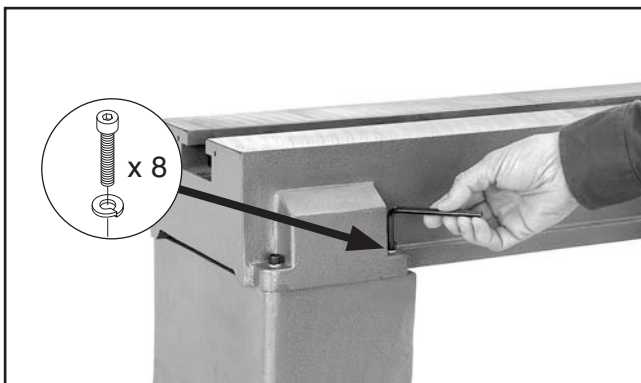
## To assemble your lathe:

1. Position the right and left stand legs upright approximately 57<sup>3</sup>/<sub>4</sub>" apart, and get them reasonably aligned (see **Figure 9**).



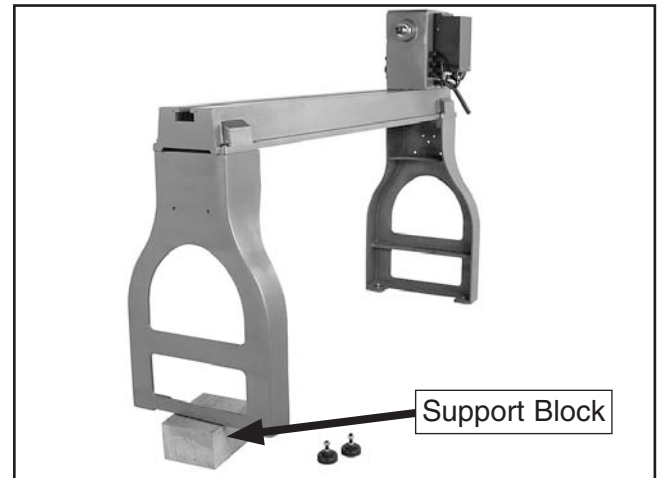
**Figure 9.** Supporting legs.

2. Carefully position the lathe onto the stands and align the mounting holes.
3. Secure the lathe assembly to the stand legs with (8) M8-1.25 x 35 cap screws and 8mm lock washers, as shown in **Figure 10**.



**Figure 10.** Securing lathe assembly.

4. If bolting the lathe to the floor, skip to **Step 7**. Otherwise, move the tailstock, tool rest assembly, and headstock to one end of the lathe bed (refer to **OPERATIONS** section, beginning on **Page 19**, for instructions for moving these components).
5. Use assistants to lift one end of the lathe onto support blocks and stabilize the lathe in preparation for installing the machine feet (see **Figure 11**).



**Figure 11.** Legs supported for feet installation.

6. Remove the top hex nut from the feet, then insert the feet into the mounting holes of the leg (see **Figure 12**). Do not tighten the hex nuts yet. Remove the supporting block and repeat **Steps 5–6** on the other leg.



**Figure 12.** Machine feet installed.

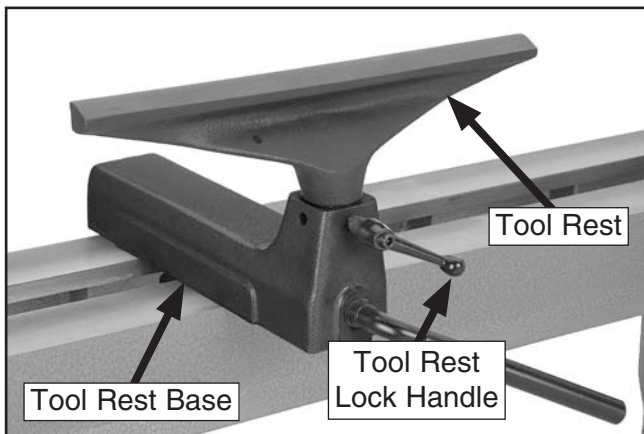


- Place the level on the lathe bed and make necessary adjustments so that the bed is level from side-to-side and front-to-back.

—If you are using the machine feet, adjust the top and bottom hex nuts on each leg to level the bed; then tighten the hex nuts to secure these adjustments.

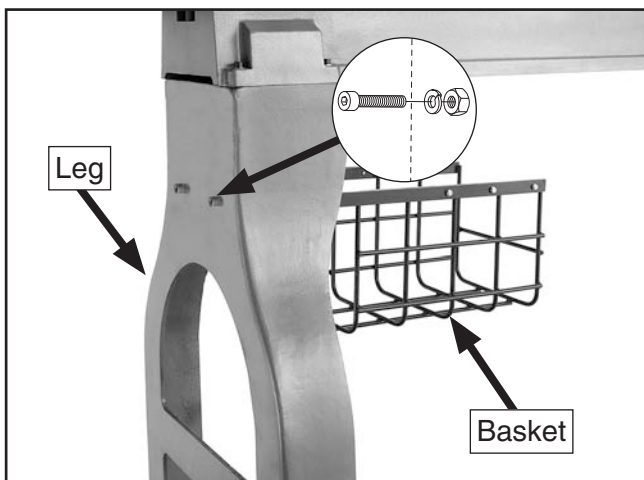
—If you are bolting your lathe to the floor, use shims under the legs to level the bed; then tighten the mounting fasteners.

- Insert the tool rest into the tool rest base and tighten the tool rest lock handle, as shown in **Figure 13**.



**Figure 13.** Tool rest installed on the tool rest base.

- Attach the storage basket to the leg using the remaining (2) M8-1.25 x 35 cap screws, (2) 8mm lock washers, and (2) M8-1.25 hex nuts, as shown in **Figure 14**.



**Figure 14.** Attaching basket to leg.

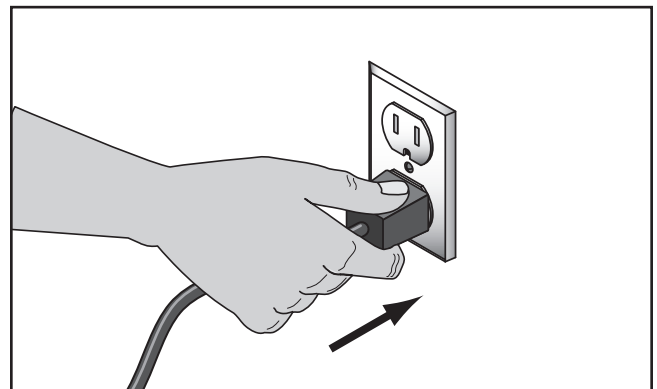
## Power Connection

After you have completed all previous setup instructions and circuit requirements, the machine is ready to be connected to the power supply.

To avoid unexpected startups or property damage, use the following steps whenever connecting or disconnecting the machine.

### Connecting Power

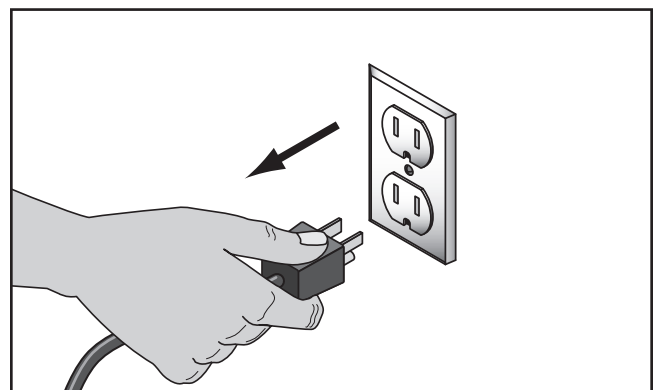
- Turn the machine power switch **OFF**.
- Insert the power cord plug into a matching power supply receptacle. The machine is now connected to the power source.



**Figure 15.** Connecting power.

### Disconnecting Power

- Turn the machine power switch **OFF**.
- Grasp the molded plug and pull it completely out of the receptacle. Do not pull by the cord as this may damage the wires inside.



**Figure 16.** Disconnecting power.



# Test Run

---

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation. The test run consists of verifying the following: 1) The motor powers up and runs correctly and 2) the STOP button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 37**.

If you cannot find a remedy, contact our Tech Support at (570) 546-9663 for assistance.

## **WARNING**

**Before starting the lathe, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!**

### To test run your lathe:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is set up properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.
4. Set the spindle direction switch to the neutral or "O" position and turn the speed control knob all the way counterclockwise.
5. Squeeze the tab on the side of the EMERGENCY STOP button in, lift the button to open the switch cover, and press the green ON button to start the machine.

6. Verify that the machine is operating correctly by turning the spindle direction switch to the "R" position, and slowly turn the speed control knob to the right.

—When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

—Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

7. Turn the speed control knob all the way counterclockwise.

8. Turn the spindle direction switch to the "L" position, and slowly turn the speed control knob to the right.

—When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

9. Move the spindle direction switch to the "O" position, and push in the EMERGENCY STOP button.

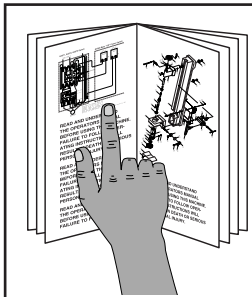
10. WITHOUT opening the EMERGENCY STOP button, turn the spindle direction switch to the "R" and "L" positions. The machine should not start at either position.

—If the machine *does not* start, the EMERGENCY stop button safety feature is working correctly. The **Test Run** is complete.

—If the machine *does* start (with the EMERGENCY stop button pushed in), immediately disconnect power to the machine. The EMERGENCY stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.



# SECTION 4: OPERATIONS

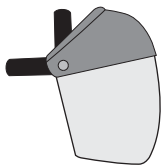


## **!WARNING**

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

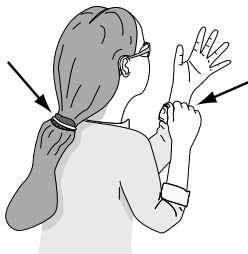
## **!WARNING**

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.



## **!WARNING**

Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.



## **NOTICE**

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

## Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual and seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

To complete a typical operation, the operator does the following:

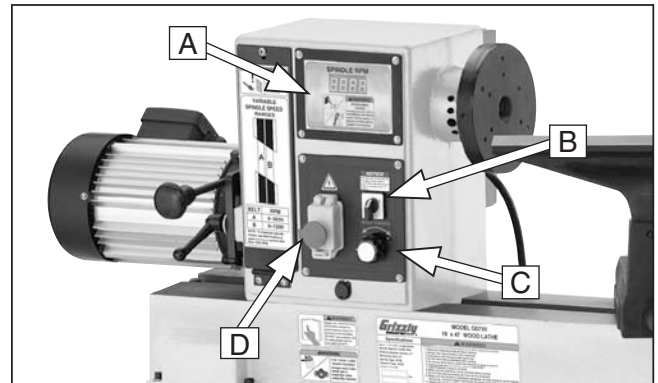
1. Examines the workpiece to make sure it is suitable for turning. No extreme bows, knots, or cracks should exist.
2. Prepares and trims up the workpiece with a bandsaw or table saw to make it roughly concentric.
3. Installs the workpiece between centers, or attaches it to a faceplate or chuck.
4. Adjusts the tool rest to  $\frac{1}{8}$ " above the workpiece centerline, and sets the minimum clearance between the workpiece and the lip of the tool rest to  $\frac{1}{4}$ " gap.
5. Rotates the workpiece by hand to verify that the spindle and workpiece rotate freely throughout the full range of motion.
6. Positions any dust collection hoods near the workpiece to collect wood chips and secures it in place.



7. Verifies the pulley ratio is set for the appropriate speed range for the operation, type of wood, and size of workpiece installed.
8. Verifies the spindle direction switch is in the "O" position and the spindle speed dial is turned all the way counterclockwise so the spindle does not start turning at high speed.
9. Ties back loose hair and clothing, and puts on face shield and respirator. Takes all other required safety precautions.
10. Starts the lathe and dust collector, adjusts the spindle direction and lathe speed, and carefully begins the turning operation, keeping the chisel against the tool rest the entire time it is cutting.

## Basic Controls

Refer to **Figure 17** and the list below to familiarize yourself with the lathe controls. You will find that understanding the names and descriptions of the controls is useful when reading this **OPERATIONS** section.



**Figure 17.** Control panel and RPM Readout.

- A. Spindle RPM Readout:** Indicates the spindle speed in RPM (rotations per minute).
- B. Spindle Direction Switch:** Toggles the spindle direction between clockwise or counterclockwise.
- C. Speed Control Knob:** Adjusts the spindle speed from low to high within the range governed by the pulley belt position.
- D. ON/OFF Switch w/Emergency STOP Button:** Turns the lathe ON and OFF.



# Stock Inspection & Requirements

Some workpieces are not safe to turn or may require modification before they are safe to turn. **Before turning a workpiece, inspect all workpieces for the following:**

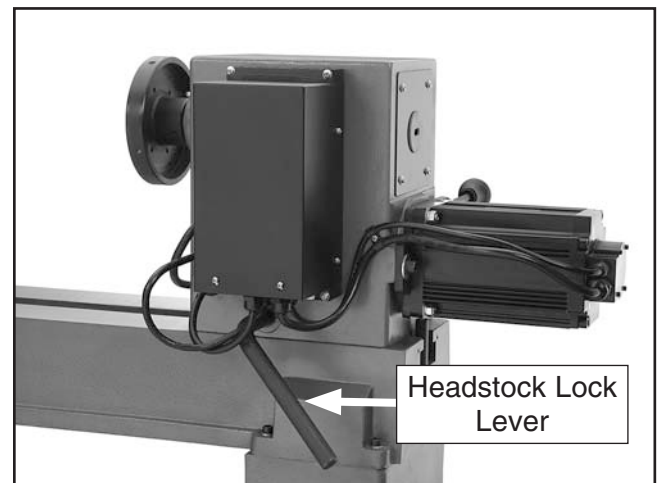
- **Workpiece Type:**  
This machine is intended for turning natural wood products. Never attempt to turn any composite wood materials, plastics, metal, stone, or rubber workpieces; turning these materials can lead to machine damage or severe injury.
- **Foreign Objects:**  
Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator, cause tool grab, or break the turning tool, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT turn the workpiece.
- **Large/Loose Knots:**  
Loose knots can become dislodged during the turning operation. Large knots can cause a workpiece to completely break in half during turning and cause machine damage and injury. Choose workpieces that do not have large/loose knots.
- **Excessive Warping:**  
Workpieces with excessive bowing or twisting are unstable and unbalanced. Never turn these workpieces at high speed, or instability will be magnified and the workpiece can be ejected from the lathe causing injury. Only turn concentric workpieces!

# Adjusting Headstock

The Model G0733 headstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is tightened, a locking plate lifts up underneath the bed and secures the tailstock in place. The headstock can be positioned anywhere along the lathe bed.

**To position the headstock along the length of the lathe bed:**

1. DISCONNECT LATHE FROM POWER!
2. Loosen the headstock lock lever (see **Figure 18**).



**Figure 18.** Headstock lock lever location.

3. Slide the headstock to the desired location on the bed, and use the headstock lock handle to secure the headstock in position.

**Note:** *The large clamping hex nut underneath the headstock will require occasional adjusting to ensure proper clamping pressure of the headstock to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.*

## **⚠️ WARNING**

**Always operate the lathe with the headstock firmly locked to the bed. Otherwise, serious personal injury may occur as the workpiece or faceplate could shift during operation or be ejected from the lathe.**

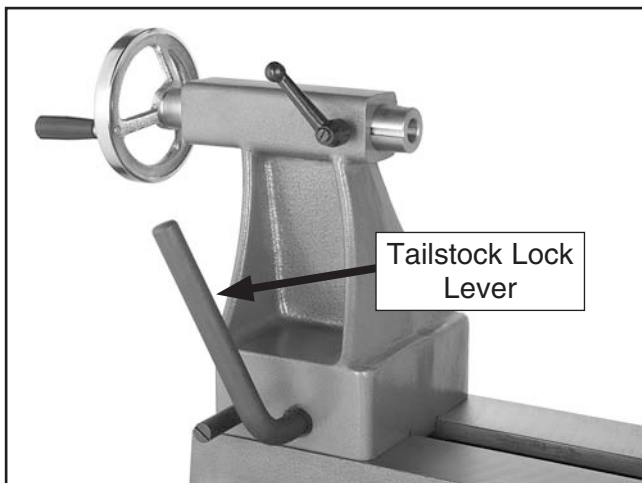


# Adjusting Tailstock

The tailstock adjusts in the same manner as the headstock.

## To position the tailstock along the length of the bed:

1. Loosen the tailstock lock lever and move the tailstock to the desired position along the bed, as shown in **Figure 19**.



**Figure 19.** Tailstock lock lever location.

2. Re-engage the tailstock lock lever to secure the tailstock to the bed.

**Note:** *The large clamping hex nut underneath the tailstock will require occasional adjusting to ensure proper clamping pressure of the tailstock to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.*

## **!WARNING**

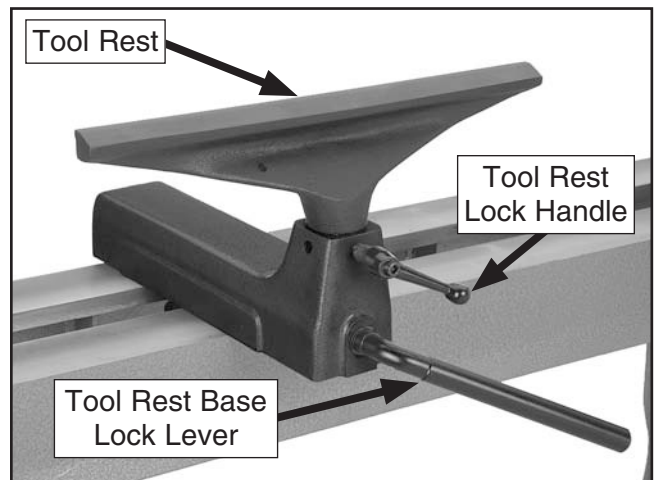
**Always operate the lathe with the tailstock firmly locked to the bed. Otherwise, serious personal injury may occur by the tailstock moving during operation and the workpiece being ejected at high speed.**

# Adjusting Tool Rest

The tool rest assembly on the Model G0733 has two adjustable components, to provide the safest and most stable position when operating the lathe. The tool rest base adjusts in the same manner as the headstock and tailstock. The tool rest pivots and may be adjusted vertically in the tool rest base.

## To position the tool rest assembly along the length of the lathe bed:

1. Loosen the tool rest base lock handle and move the tool rest assembly to the desired position on the lathe bed, as shown in **Figure 20**.



**Figure 20.** Tool rest controls.

2. Re-engage the tool rest base lock lever to secure the tool rest assembly in position.

**Note:** *The large clamping hex nut underneath the tool rest base will require occasional adjusting to ensure proper clamping pressure of the tool rest assembly to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.*



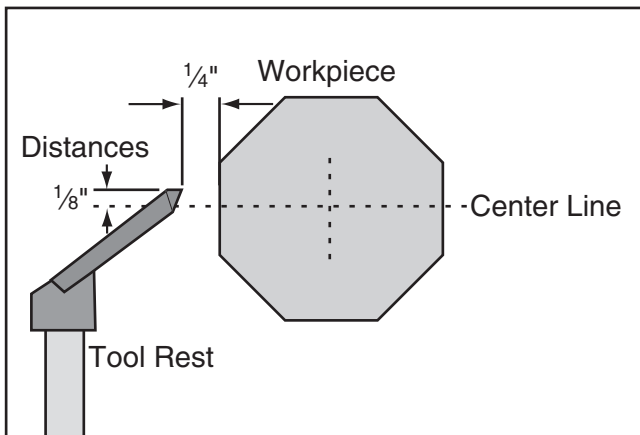


## **!WARNING**

Always operate the lathe with the tool rest assembly firmly locked in position. Otherwise, serious personal injury may occur by the tool being pulled from the operator's hands.

### To adjust the angle or height of the tool rest:

1. Loosen the tool rest base lock lever and the tool rest lock handle to adjust the position of the tool rest.
2. Position the tool rest approximately  $\frac{1}{4}$ " away from the workpiece and approximately  $\frac{1}{8}$ " above the workpiece center line, as shown in **Figure 21**.



**Figure 21.** Tool rest position relative to workpiece.

3. Re-tighten the tool rest lock handle and the tool rest base lock lever to secure the tool rest in position.

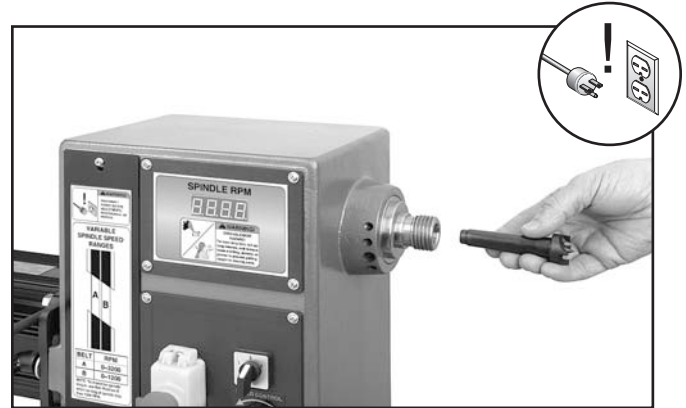
## Installing/Removing Headstock Center

The included spur center installs into the headstock spindle with an MT#2 tapered fit.

### Installing the Headstock Center

1. DISCONNECT LATHE FROM POWER!

2. Make sure the mating surfaces of the center and spindle are free of debris and oily substances before inserting the center to ensure a good fit and reduce runout.
3. Insert the tapered end of the center into the spindle, and push it in with a quick, firm motion, as shown in **Figure 22**.

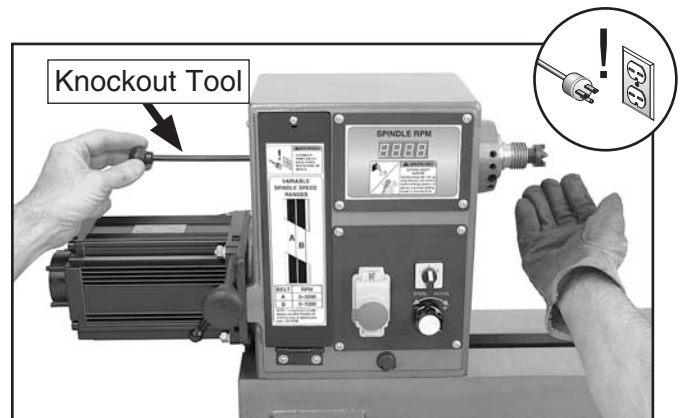


**Figure 22.** Installing center into the headstock spindle.

4. Make sure the center is securely installed by attempting to pull it out by hand—a properly installed center will not pull out easily.

### Removing the Headstock Center

1. DISCONNECT LATHE FROM POWER!
2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.
3. Insert the knockout tool through the outbound end of the spindle and firmly tap the back of the center, catching it as it falls, as shown in **Figure 23**.



**Figure 23.** Removing the headstock center.

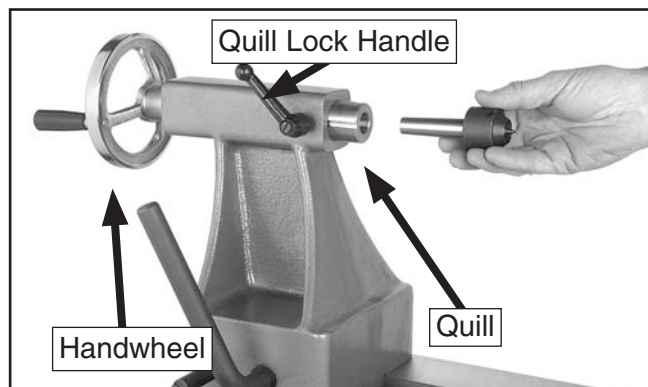


# Installing/Removing Tailstock Center

The included live center installs into the tailstock quill with an MT#2 tapered fit.

## Installing the Tailstock Center

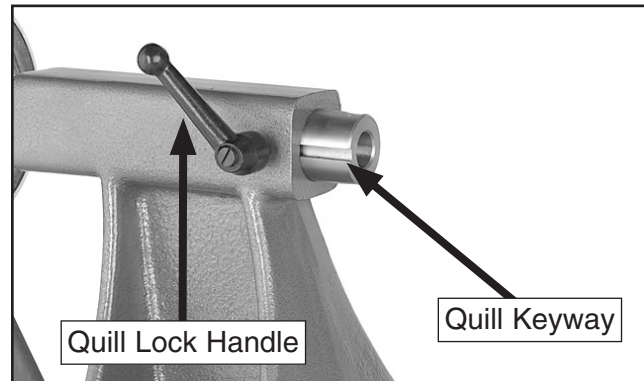
1. On the tailstock, loosen the quill lock handle and rotate the handwheel until the quill extends out about 1", as shown in **Figure 24**.



**Figure 24.** Installing center into tailstock quill.

2. Make sure the mating surfaces of the center and quill are free of debris and oily substances before inserting the center to ensure a good fit reduce runout.
3. Firmly insert the tapered end of the center into the tailstock quill, as shown in **Figure 24**.
4. Make sure the center is securely installed by attempting to pull it out by hand—a properly installed center will not pull out by hand.

5. Make sure the center of the quill lock handle is aligned with the quill keyway to ensure that the tailstock center and quill will not freely rotate under load (see **Figure 25**).



**Figure 25.** Quill lock handle aligned with quill keyway.

6. Secure the quill in place by re-tightening the quill lock handle.

## Removing the Headstock Center

1. Loosen the quill lock handle.
2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.
3. Rotate the handwheel counterclockwise—the tailstock quill will retract back into the quill, causing the center to be forced out of the quill.

## **!WARNING**

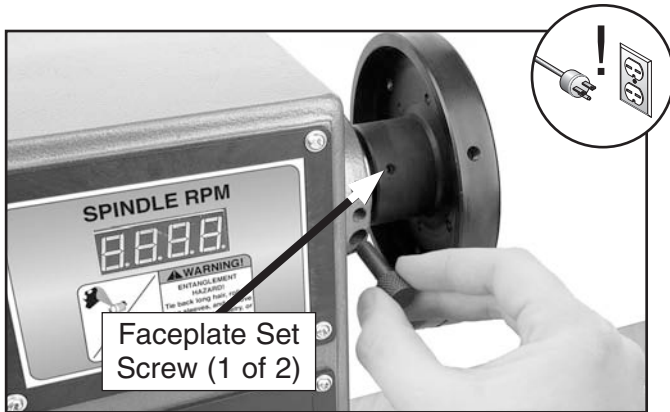
The tailstock quill must always be locked in place during lathe operation. Before tightening the quill lock handle, it must be properly aligned with the quill keyway. Otherwise, the workpiece can be thrown from the lathe causing serious personal injury or death.



# Installing Faceplate

To install the faceplate:

1. DISCONNECT LATHE FROM POWER!
2. Insert the indexing pin into one of the indexing holes and rotate the spindle until the pin engages to prevent the spindle from turning while you tighten the faceplate, as shown in **Figure 26**.



**Figure 26.** Locking spindle with indexing pin and faceplate set screw location.

3. Thread the faceplate onto the spindle until it is snug.
4. Using the included 4mm hex wrench, tighten the two set screws along the inside diameter of the faceplate to secure it to the spindle (see **Figure 26**).

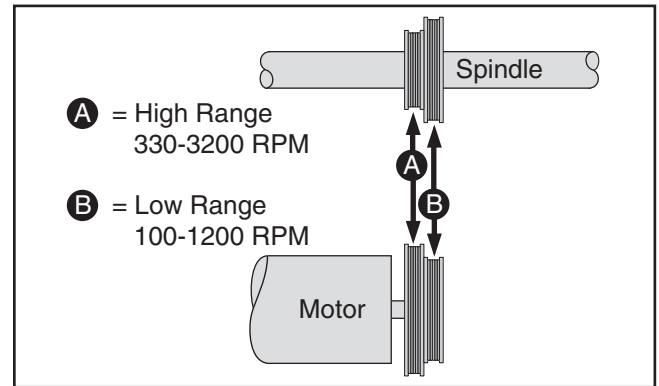
## ⚠ WARNING

To prevent the faceplate and workpiece separating from the spindle during operation, the headstock faceplate **MUST** be firmly threaded onto the spindle and secured in place by fully tightening the two faceplate set screws. If these instructions are not properly performed, serious personal injury could occur.

**Note:** To remove the faceplate, disconnect the lathe from the power source and perform the steps above in reverse.

# Changing Speed Ranges

The Model G0733 has pulley belt configuration provided two speed ranges (see **Figure 27**).



**Figure 27.** Speed range belt positions.

**Note:** To maximize spindle torque, use the low spindle speed range for spindle speeds of 1200 RPM or less.

Refer to the speed recommendations chart in **Figure 28** to choose the appropriate RPM for your operation. Then choose the speed range that will include the selected RPM.

Diameter of Work-piece	Roughing RPM	General Cutting RPM	Finishing RPM
Under 2"	1520	3200	3200
2-4"	760	1600	2480
4-6"	510	1080	1650
6-8"	380	810	1240
8-10"	300	650	1000
10-12"	255	540	830
12-14"	220	460	710
14-16"	190	400	620

**Figure 28.** Model G0733 speed recommendations.

To change speed ranges:

1. DISCONNECT LATHE FROM POWER!



# **! WARNING**

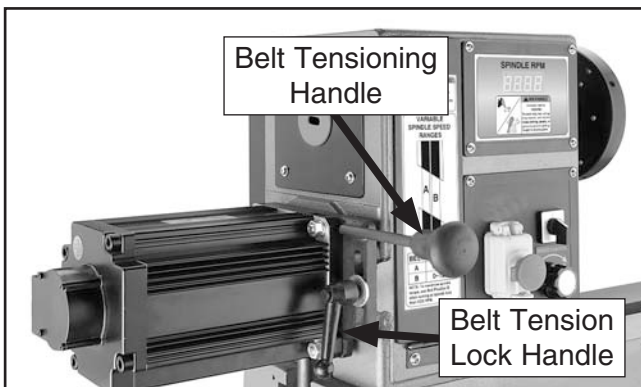
Always choose the correct spindle speed for an operation. Using the wrong speed may lead to the workpiece being thrown at high speed, causing fatal or severe impact injuries.

2. Open the front belt access panel, as shown in **Figure 29**.



**Figure 29.** Belt access panel removed.

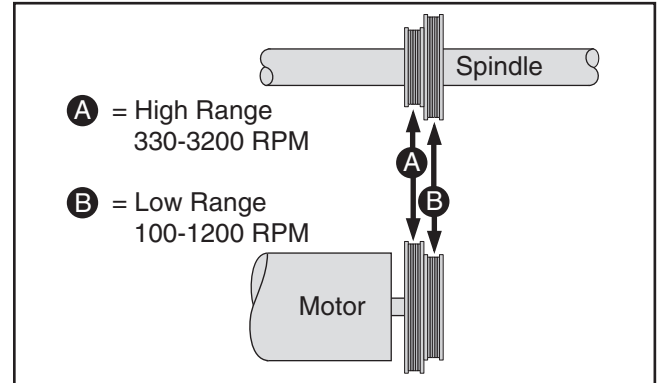
3. Loosen the belt tension lock handle (**Figure 30**).



**Figure 30.** Motor tensoning handle and tension lock handle.

4. Use the belt tensioning handle (**Figure 30**) to lift the motor assembly all the way up, then re-tighten the belt tension lock handle—this will hold the motor in place while you change the belt position.

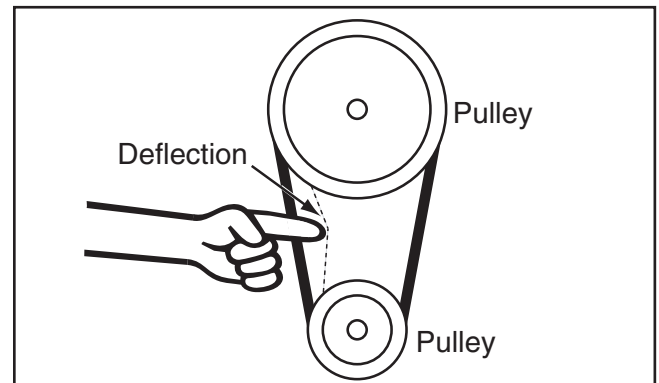
5. Reach into the belt access cavity and roll the belt onto the desired set of pulleys, as shown in **Figure 31**.



**Figure 31.** Speed range belt positions.

6. Loosen the belt tension lock handle and lower the motor.
7. Apply downward pressure on the belt tensioning handle to properly tension the drive belt, then re-tighten the belt tension lock handle.

**Note:** When properly tensioned, the belt should deflect about  $\frac{1}{8}$ " when moderate pressure is applied to the belt mid-way between the upper and lower pulley, as shown in **Figure 32**.



**Figure 32.** Testing for  $\frac{1}{8}$ " belt deflection.

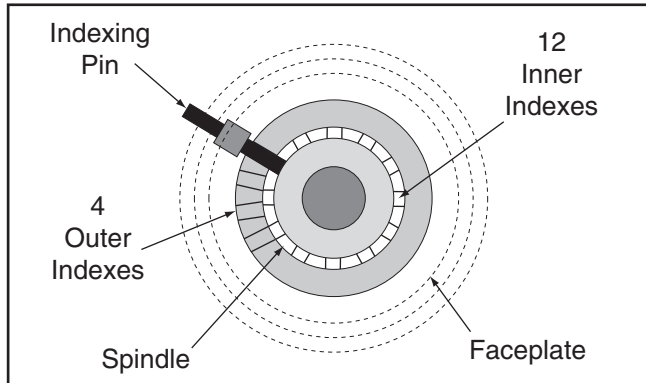
8. Replace the front belt access panel.



# Indexing

Indexing on a lathe is typically used for workpiece layout and other auxiliary operations that require equal distances around the workpiece circumference, such as clock faces or inlays.

By inserting the indexing pin into one of the four outer indexes of the Model G0733 spindle housing and engaging one of the 12 inner indexes in the spindle, the workpiece can be positioned in 10° increments, as shown in **Figures 33–34**.



**Figure 33.** Model G0733 indexing configuration.



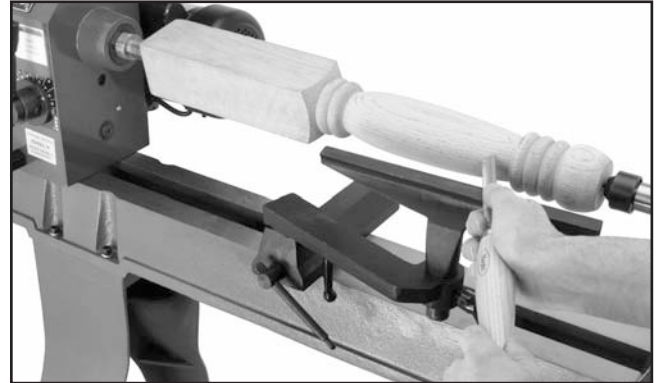
**Figure 34.** Indexing pin and indexing holes.

## ⚠ CAUTION

Always disconnect the lathe from power before using the indexing feature. **DO NOT** start the lathe with the indexing pin inserted into the spindle; otherwise entanglement injury and property damage could occur.

# Spindle Turning

Spindle turning is the operation performed when a workpiece is mounted between the headstock and the tailstock, as shown in **Figure 35**.



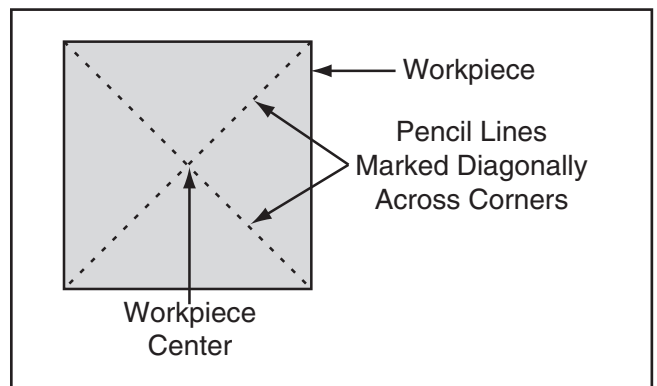
**Figure 35.** Typical spindle turning operation.

## ⚠ WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.

To set up a spindle turning operation:

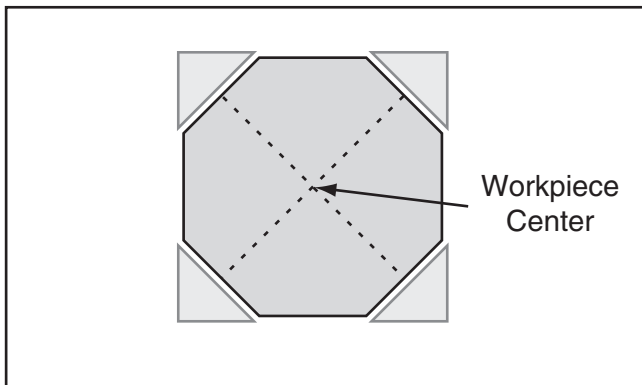
1. Find the center point of both ends of your workpiece by drawing diagonal lines from corner to corner across the end of the workpiece, as shown in **Figure 36**.



**Figure 36.** Workpiece marked diagonally from corner to corner to determine the center.

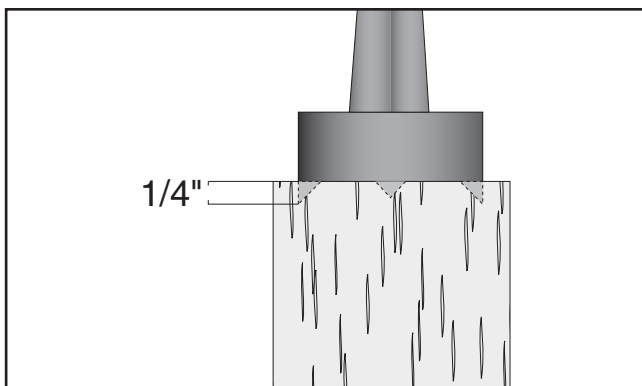


2. Make a center mark by using a wood mallet and tapping the point of the spur center into the center of the workpiece on both ends.
3. Using a 1/4" drill bit, drill a 1/4" deep hole at the center mark on the end of the workpiece to be mounted on the headstock spur center.
4. To help embed the spur center into the workpiece, cut 1/8" deep saw kerfs in the headstock end of the workpiece along the diagonal lines marked in **Step 1**.
5. If your workpiece is over 2" x 2", cut the corners off the workpiece lengthwise to make turning safer and easier (see **Figure 37**).



**Figure 37.** Corners of workpiece removed.

6. Drive the spur center into the end center mark of the workpiece with a wood mallet to embed it at least 1/4" into the workpiece, as shown in **Figure 38**.



**Figure 38.** Spur center properly embedded.

7. With the workpiece still attached, insert the spur center into the headstock spindle (refer to **Installing/Removing Headstock Center** on **Page 23** for additional instructions).

**Note:** Use the tool rest to support the opposite end of the workpiece so that the workpiece and spur center do not separate during installation.

8. Install the live center into the tailstock quill and tighten the quill lock handle to lock the quill in position (refer to **Page 24** for additional instructions).
9. Slide the tailstock toward the workpiece until the point of the live center touches the workpiece center mark, then lock the tailstock in this position.
10. Loosen the quill lock handle and rotate the tailstock handwheel to push the live center into the workpiece at least a 1/4".

## **!WARNING**

Do not press the workpiece too firmly with the tailstock or the bearings will bind and overheat. Do not adjust the tailstock too loosely or the workpiece will spin off the lathe. Use good judgment and care, otherwise, serious personal injury could result from the workpiece being ejected at high speeds.

11. Properly adjust the tool rest to the workpiece (see **Adjusting Tool Rest** on **Page 23**).
12. Before beginning lathe operation, rotate the workpiece by hand to ensure that there is safe clearance on all sides.

## **!WARNING**

Keep the lathe tool resting on the tool rest the ENTIRE time that it is in contact with workpiece or when preparing to make contact between lathe tool and workpiece. Otherwise, the spinning workpiece could force the lathe tool out of your hands or entangle your hands with the workpiece. Failure to heed this warning could result in serious personal injury.

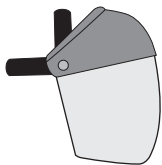


## Spindle Turning Tips:

- When turning the lathe **ON**, stand away from the path of the spinning workpiece until the spindle reaches full speed and you can verify that the workpiece will not come loose.
- Use the slowest speed when starting or stopping the lathe.
- Select the right speed for the size of workpiece that you are turning (refer to **Figure 28** on **Page 25**).
- Keep the turning tool on the tool rest the ENTIRE time that it is in contact with the workpiece.
- Learn the correct techniques for each tool you will use. If you are unsure about how to use the lathe tools, read books or magazines about lathe techniques, and seek training from experienced and knowledgeable lathe users.

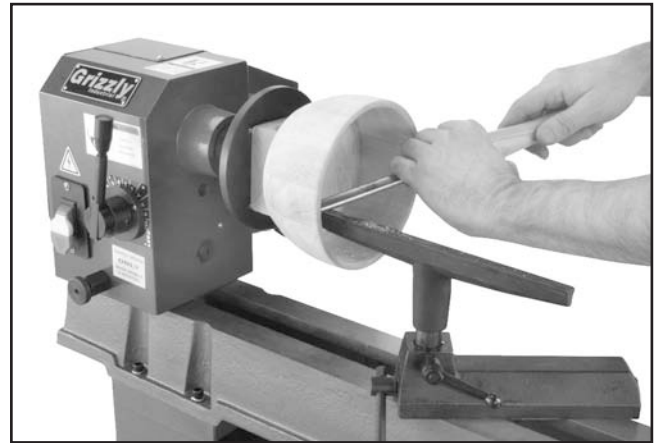
### **!WARNING**

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.



## Faceplate Turning

Faceplate turning is when a workpiece is mounted to the faceplate, which is then mounted to the headstock spindle, as shown in **Figure 39**. This type of turning is usually done with open-faced workpieces like bowls or plates.



**Figure 39.** Typical faceplate turning operation.

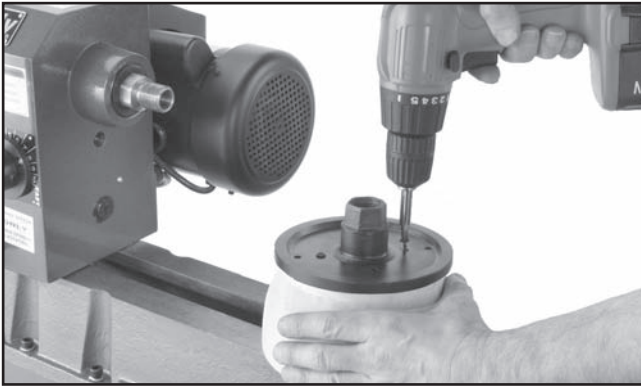
### Mounting the Workpiece onto the Faceplate

1. Mark the workpiece center in the same manner as described in **Spindle Turning** (see **Page 27**).

**Note:** Cut off corners of the workpiece to make it as close to "round" as possible as described in **Spindle Turning** (see **Page 27**).

2. Center the faceplate on the workpiece and attach it, as shown in **Figure 40**, with wood screws that do not have tapered heads (see **Figure 41**).

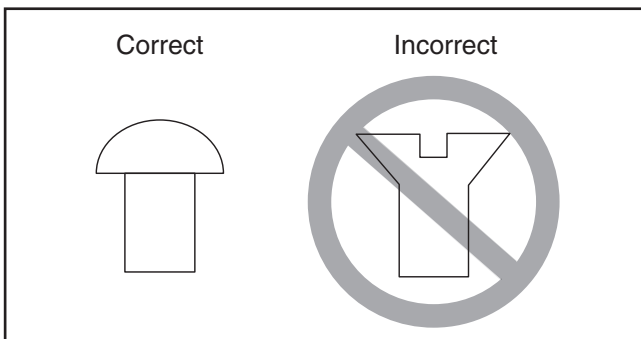




**Figure 40.** Typical attachment of faceplate to workpiece.

## NOTICE

Only use screws with non-tapered heads (see Figure 41) to attach the faceplate to the workpiece. Screws with tapered heads can split the faceplate or snap off during operation.



**Figure 41.** Correct and incorrect screw types.

3. Thread and secure the faceplate onto the headstock spindle (refer to **Headstock Faceplate** on **Page 25** for faceplate mounting instructions).

— If wood screws cannot be placed in the workpiece, the faceplate can be mounted to a backing block attached to the workpiece (see **Mounting the Workpiece to a Backing Block**).

## Mounting Workpiece to Backing Block

1. Make the backing block from a suitable size piece of scrap wood.

**Note:** *The faces of the backing block must be flat and parallel to each other, or the uneven surfaces will cause the workpiece to spin eccentricly, causing unnecessary vibration and runout. It is best to mount the backing block to the faceplate and turn the other surface flat prior to mounting.*

2. Locate and mark the center of both the workpiece and backing block.
3. Drill a ¼" hole through the center of the backing block.
4. Look through the hole in the backing block to line up the center with the workpiece and glue and clamp the backing block to the workpiece.

**Note:** *Allow the glue to cure according to the manufacturer's instructions.*

5. Follow **Steps 1–3** under **Mounting the Workpiece onto the Faceplate** (see **Page 33**) to attach the backing block to the faceplate.

## Outboard Turning

Outboard turning is a variation of faceplate turning and is accomplished with the headstock positioned so the faceplate is not directly over the bed, allowing a larger turning capacity than the swing specification of the lathe. On the G0733, the maximum workpiece diameter that can safely be outboard-turned is limited to 17".

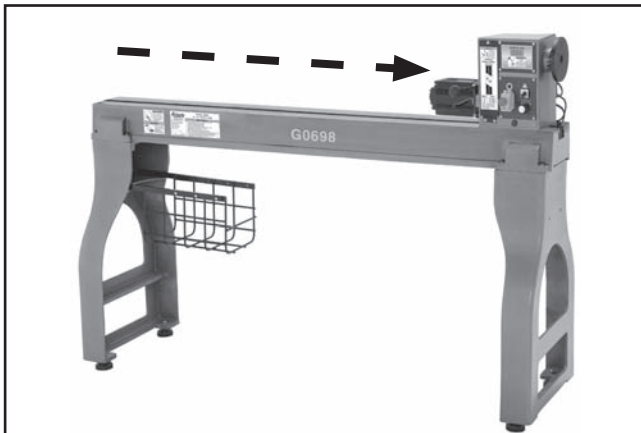
The only way to rotate the headstock on this machine is to remove it from the bed first, which can be a heavy and cumbersome task. A much simpler alternative to removing the headstock is to simply remove the tailstock and slide the headstock to the other end of the bed. This will position the spindle so it is not directly over the bed whereby outboard turning can safely be accomplished.





## To outboard turn on the Model G0733:

1. DISCONNECT LATHE FROM POWER!
2. Remove the tailstock and tool base from the machine by removing the hex nuts and clamp washers located underneath the assemblies, then lifting them from the lathe bed.
3. Loosen the headstock, then move it all the way to the tail end of the lathe bed, as shown in **Figure 42**.



**Figure 42.** Lathe prepared for outboard turning.

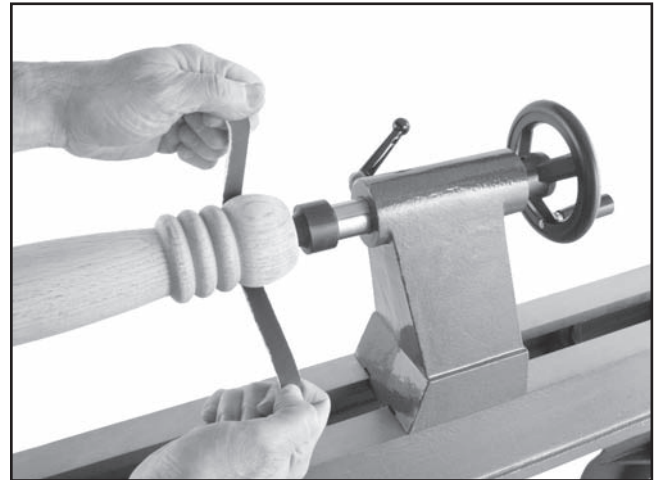
4. Re-tighten the headstock to the bed.

### **!WARNING**

When outboard turning, **ALWAYS** use a floor mounted tool rest and keep the tool in contact with the rest during all turning operations. Failure to do so could cause the tool to be pulled out of the operator's control and ejected at high speed.

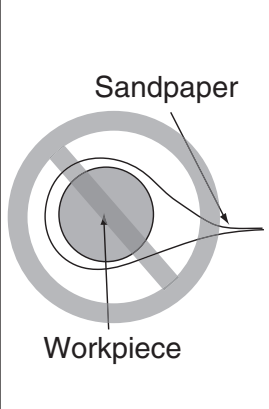
## Sanding/Finishing

After the turning operations are complete, the workpiece can be sanded and finished before removing it from the lathe, as shown in **Figure 43**.



**Figure 43.** Typical sanding operation.

**Note:** Whenever sanding or finishing, move the tool rest holder out of the way to increase personal safety and gain adequate working room.

	<h3><b>!WARNING</b></h3> <p>Wrapping the sandpaper completely around the workpiece could pull your hands into the moving workpiece and may cause serious injury. Never wrap sandpaper or finishing materials completely around the workpiece.</p>
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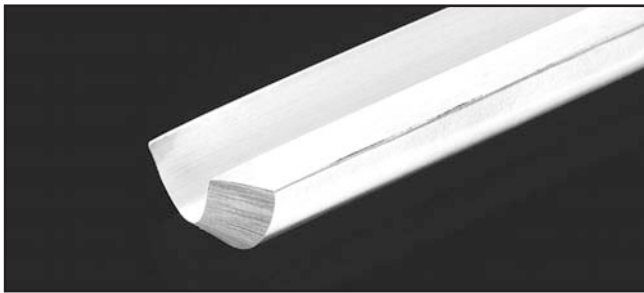


# Selecting Turning Tools

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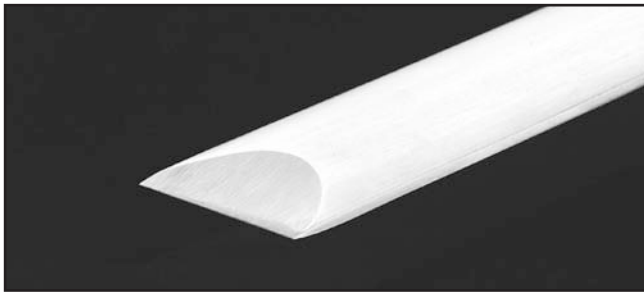
Lathe tools come in a variety of shapes and sizes, and usually fall into five major categories.

- **Gouges**—Mainly used for rough cutting, detail cutting, and cove profiles. The rough gouge is a hollow, double-ground tool with a round nose, and the detail gouge is a hollow, double-ground tool with either a round or pointed nose.



**Figure 44.** Example of a gouge.

- **Skew Chisel**—A very versatile tool that can be used for planing, squaring, V-cutting, beading, and parting off. The skew chisel is flat, double-ground with one side higher than the other (usually at an angle of 20°–40°).



**Figure 45.** Example of a skew chisel.

- **Scrapers**—Typically used where access for other tools is limited, such as hollowing operations. This is a flat, double-ground tool that comes in a variety of profiles (round nose, spear point, square nose, etc.) to match many different contours.



**Figure 46.** Example of a round nose scraper.

- **Parting Tools**—Used for sizing and cutting off work. This is a flat tool with a sharp pointed nose that may be single- or double-ground.



**Figure 47.** Example of a parting tool.

- **Specialty Tools**—These are the unique, special function tools to aid in hollowing, bowl making, cutting profiles, etc. The Swan Neck Hollowing Tool shown on **Page 35** is a good example of a speciality tool.



# SECTION 5: ACCESSORIES

## **⚠️ WARNING**

Some aftermarket accessories can be installed on this machine that could cause it to function improperly, increasing the risk of serious personal injury. To minimize this risk, only install accessories recommended for this machine by Grizzly.

## **NOTICE**

Refer to the newest copy of the Grizzly Catalog for other accessories available for this machine.

**Call 1-800-523-4777 To Order**

### **Sovereign Turning System**

Sovereign is a new handle and tool system allowing the turner to customize the tools they need for the type of turning they do. Sold with or without  $\frac{3}{8}$ " and  $\frac{1}{2}$ " collet options, plus the gamut of tool tips will make you wonder how you managed without a Sovereign. All tools are high speed steel construction for long life and dependable use. Below are just some of the options available with this system.

**T21644—16" Sovereign System w/ Collets**

**T21645—22" Sovereign System w/ Collets**

**T21648—Sovereign  $\frac{3}{8}$ " Collets**

**T21649—Sovereign  $\frac{1}{2}$ " Collets**

**T21654— $\frac{1}{4}$ " Bowl Gouge**

**T21655— $\frac{3}{8}$ " Bowl Gouge**

**T21656— $\frac{1}{2}$ " Bowl Gouge**

**T21660— $\frac{3}{4}$ " Bowl Gouge**



**Figure 48.** Sovereign 16" and 22" handles.

### **T23311—Shop Fox 5-pc. Lathe Chisel Set**

With massive high speed steel blades and long ash handles, this set includes a 1" roughing gouge,  $\frac{3}{8}$ " straight chisel, a hollowing tool,  $\frac{3}{8}$ " spindle gouge, and a  $\frac{1}{8}$ " parting tool. Also includes a fitted aluminum case.



**Figure 49.** Shop Fox 5-pc. chisel set.

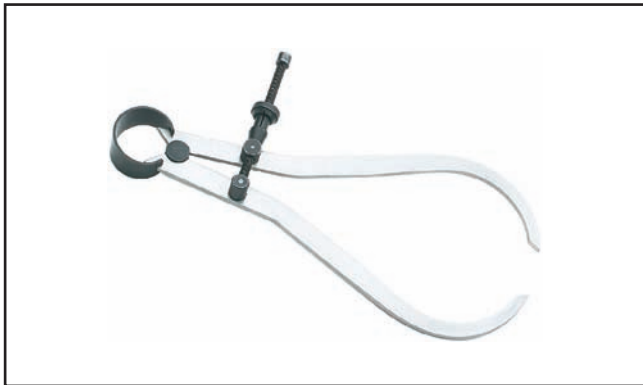
### **H7940—3-pc. Lathe Scraper Set**

This set is ideal for bowl turning and detail work. Each chisel measures roughly 16" long with 10" ash handles and high speed steel blades. Set includes one round, one curved, and one 90° corner chisel.



**Figure 50.** 3 pc. scraper set.

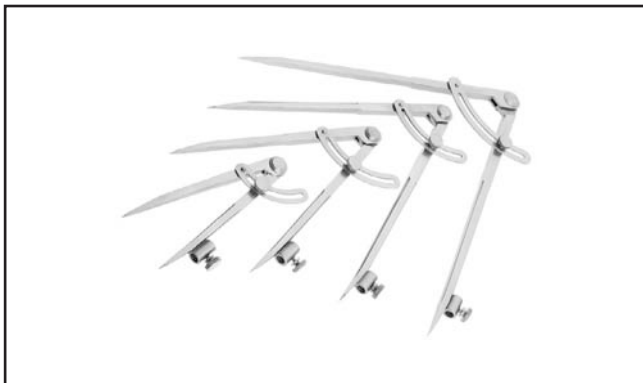
**G9274—6" Stainless Steel Outside Calipers**  
**G9275—8" Stainless Steel Outside Calipers**  
**G9276—10" Stainless Steel Outside Calipers**  
**G9277—12" Stainless Steel Outside Calipers**  
**G9278—16" Stainless Steel Outside Calipers**  
 Spring Calipers with quick adjustment nut provide fast determination of external measurements. Ideal for physically transferring dimensions from originals. Five different sizes allow you to match the best caliper for your shop needs.



**Figure 51.** Model G9278 16" Stainless Steel Calipers.

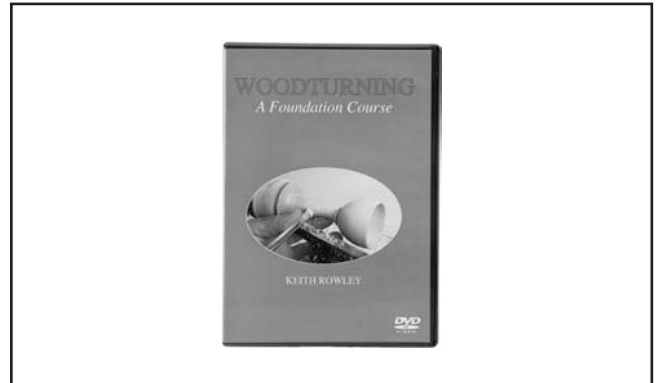
**H5884—8" Pencil Divider**  
**H5885—10" Pencil Divider**  
**H5886—12" Pencil Divider**  
**H5887—16" Pencil Divider**

Transfer precise distances for highly accurate layouts. Bisect angles for precise angle measurements. Steel legs with fine points scribe most materials. Pencil holder converts dividers to a compass. Knurled knob locks dividers from 0–90°. Size indicates leg lengths.



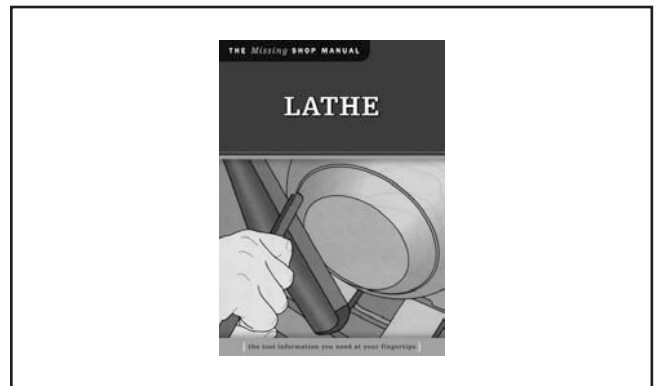
**Figure 52.** Models H5884–H5887 Pencil Dividers.

**T21771—Woodturning: A Foundation Course**  
 Designed to improve your turning, this DVD provides all of the basic turning techniques and practices in detailed step-by-step demonstrations you can follow along with. Topics include suitable workpiece and tool selection, copy turning, turning between centers of faceplate, sanding and fine finishing, and maintaining and edge on your tools.



**Figure 53.** Model T21771 Woodturning: A Foundation Course DVD.

**T21985—The Missing Shop Manual: Lathe**  
 This manual covers all the things your new lathe is designed to do. Besides explaining safety and set-up, this handy reference takes you through sharpening your tools and faceplate, bowl, and spindle turning techniques. The techniques needed to maximize your lathe's capabilities and hone your skills are covered. 152 pages.



**Figure 54.** Model T20381 The Missing Shop Manual: Lathe book.



### G5683—Magnetic Base Light

Light up your work just where you need it. This flexible neck lamp attaches with the twist of a switch so that you can use on any machine.



Figure 55. Magnetic base light.

### H2371—GOOD STUFF Wood Finish 1 Pint

### H2372—GOOD STUFF Wood Finish 1 Quart

For bare wood surfaces, this fast drying synthetic oil has been formulated to enhance the natural look of wood. Non-toxic, alcohol resistant and FDA approved for food contact. Sold in 1 pint and 1 quart quantities!



Figure 56. GOOD STUFF bare wood finish.

### H6267—1¼" x 8 TPI Chuck

This 4-Jaw, self-centering chuck with dovetailed jaws is great for small bowl and plate turning. The feature jaws that grip by clamping around the workpiece or expanding to fit a turned recess. Compact design makes it ideal for small lathes.



Figure 57. 1¼" x 8 TPI Chuck.

## Recommended Metal Protectants

G5562—SLIPIT® 1 Qt. Gel

G5563—SLIPIT® 12 oz Spray

G2871—Boeshield® T-9 12 oz Spray

G2870—Boeshield® T-9 4 oz Spray

H3788—G96® Gun Treatment 12 oz Spray

H3789—G96® Gun Treatment 4.5 oz Spray



Figure 58. Recommended products for protecting unpainted cast iron/steel part on machinery.

### T10117—Big Mouth Dust Hood with Stand

Capture dust from any machine operation with this Big Mouth Dust Hood. Simply attach a 4" dust collection hose and adjust the hood right where you need it. The free standing base eliminates complicated machine set-ups and the tilting 16⅜" x 12⅞" hood adjusts from 23" to 43" high. Every shop needs one of these!



Figure 59. T10117 Big Mouth Dust Hood.

**Call 1-800-523-4777 To Order**



# SECTION 6: MAINTENANCE

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## Schedule

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For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

### Ongoing:

- Loose faceplate or mounting bolts.
- Damaged center or tooling.
- Worn or damaged wires.
- Loose machine components.
- Any other unsafe condition.

### Daily:

- Clean off dust buildup.
- Clean and lubricate lathe bed, spindle, and quill.

### Monthly:

- Belt tension, damage, or wear.
- Clean out dust buildup from inside belt/pulley cavity.

## Cleaning

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Cleaning the Model G0733 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning. Remove and debris or oily substances from the inside of the spindle and quill.

## Lathe Bed

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Protect the unpainted cast iron lathe bed by using a lightly oiled rag and wiping it clean after every use—this ensures moisture from wood dust does not remain on the bare metal surfaces.

Keep your lathe bed rust-free with regular applications of products like G96 Gun Treatment, SLIPIT, or Boeshield T-9.

## Lubrication

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All bearings for the Model G0733 are lubricated and sealed at the factory, and do not need additional lubrication.

Wipe a lightly oiled shop rag on the outside of the headstock spindle. **DO NOT** allow any oil to get on the inside mating surfaces of the spindle.

Use the tailstock handwheel to extend the quill out to the furthest position and apply a thin coat of white grease to the outside of the quill. **DO NOT** allow any oil or grease to get on the inside mating surfaces of the quill.

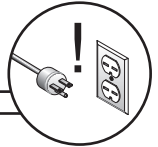


# SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support at (570) 546-9663.

**Note:** Please gather the serial number and manufacture date of your machine before calling.

## Troubleshooting

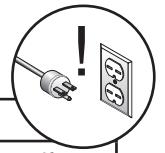


### Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> <li>Emergency stop push-button is engaged/faulty.</li> <li>Motor connection wired incorrectly.</li> <li>Spindle direction switch is at fault.</li> <li>Circuit board or control board is at fault.</li> <li>Speed rotary switch is at fault.</li> <li>Wiring is open/has high resistance.</li> <li>Motor is at fault.</li> <li>Frequency inverter is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Open switch cover and press <b>ON</b> button/replace it.</li> <li>Correct motor wiring connections.</li> <li>Replace faulty spindle direction switch.</li> <li>Replace faulty board.</li> <li>Replace bad speed rotary switch.</li> <li>Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.</li> <li>Test/repair/replace.</li> <li>Replace.</li> </ol>
Machine stalls or is underpowered.	<ol style="list-style-type: none"> <li>Machine is undersized for the task.</li> <li>Feed rate/cutting speed too fast for task.</li> <li>Belt slipping.</li> <li>Motor connection is wired incorrectly.</li> <li>Pulley slipping on shaft.</li> <li>Motor bearings are at fault.</li> <li>Motor has overheated.</li> <li>Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Use sharp lathe bits and chisels; reduce the feed rate/depth of cut.</li> <li>Decrease feed rate/cutting speed.</li> <li>Replace bad belt and re-tension (see <b>Page 39</b>).</li> <li>Correct motor wiring connections.</li> <li>Replace loose pulley.</li> <li>Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>Clean off motor, let cool, and reduce workload.</li> <li>Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation (without workpiece installed).	<ol style="list-style-type: none"> <li>Motor or component is loose.</li> <li>Belt worn or loose.</li> <li>Pulley is loose.</li> <li>Machine is incorrectly mounted or sits unevenly on floor.</li> <li>Motor mount loose/broken.</li> <li>Motor bearings are at fault.</li> </ol>	<ol style="list-style-type: none"> <li>Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>Inspect/replace belts (see <b>Page 39</b>).</li> <li>Replace shaft, pulley, setscrew, and key as required.</li> <li>Tighten/replace anchor studs in floor; relocate/shim machine; adjust feet.</li> <li>Tighten/replace.</li> <li>Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>



# Wood Lathe Operation



Symptom	Possible Cause	Corrective Action
Vibration noise while machine is running; noise changes when speed is changed.	1. Belt cover loose.	1. Tighten the screws that secure the belt cover; if necessary install a soft, vibration dampening material between the belt cover and the headstock casting.
Excessive vibration (with workpiece installed).	<ol style="list-style-type: none"> <li>1. Workpiece mounted incorrectly.</li> <li>2. Headstock, tailstock, or tool rest not securely clamped to lathe bed.</li> <li>3. Workpiece warped, out of round, or is flawed.</li> <li>4. Spindle speed is set too fast for mounted workpiece.</li> <li>5. Lathe is resting on an uneven surface.</li> <li>6. Motor mount bolts are loose.</li> <li>7. Belt is worn or damaged.</li> <li>8. Spindle bearings are worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-mount workpiece, making sure that centers are embedded in true center of workpiece.</li> <li>2. Check clamp levers and tighten if necessary.</li> <li>3. Cut workpiece to correct, or use a different workpiece.</li> <li>4. Reduce the spindle speed.</li> <li>5. Shim stand or adjust feet on stand to remove any wobbles present in the stand.</li> <li>6. Tighten motor mount bolts.</li> <li>7. Replace belt (see <b>Page 39</b>).</li> <li>8. Replace spindle bearings.</li> </ol>
Chisels grab or dig into workpiece.	<ol style="list-style-type: none"> <li>1. Tool rest set too low.</li> <li>2. Tool rest set too far from workpiece.</li> <li>3. Wrong chisel/tool being used.</li> <li>4. Chisel/tool dull.</li> </ol>	<ol style="list-style-type: none"> <li>1. Set tool rest higher. See <b>Page 22</b> for how to properly set the tool rest height.</li> <li>2. Move the tool rest closer to the workpiece. See <b>Page 22</b> for the proper workpiece/tool rest clearance.</li> <li>3. Use the correct chisel/tool; educate yourself by reading books, trade magazines, or seeking help from an experienced lathe operator.</li> <li>4. Sharpen or replace the chisel/tool you are using.</li> </ol>
Bad surface finish on workpiece.	<ol style="list-style-type: none"> <li>1. Wrong spindle speed.</li> <li>2. Dull chisel or wrong chisel being used for the operation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use trial-and-error to find a better spindle speed.</li> <li>2. Sharpen chisel or try a different chisel.</li> </ol>
Tailstock moves under load.	<ol style="list-style-type: none"> <li>1. Tailstock mounting bolt loose.</li> <li>2. Bed surface is oily or greasy.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten.</li> <li>2. Clean bed surface to remove excess oil/grease.</li> </ol>
Can't remove tapered tool from tailstock barrel.	<ol style="list-style-type: none"> <li>1. Tailstock barrel not retracted all the way back into the tailstock.</li> <li>2. Debris was not removed from taper before inserting into barrel.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn the barrel handwheel until it forces taper out of barrel.</li> <li>2. Always make sure that taper surfaces are clean.</li> </ol>

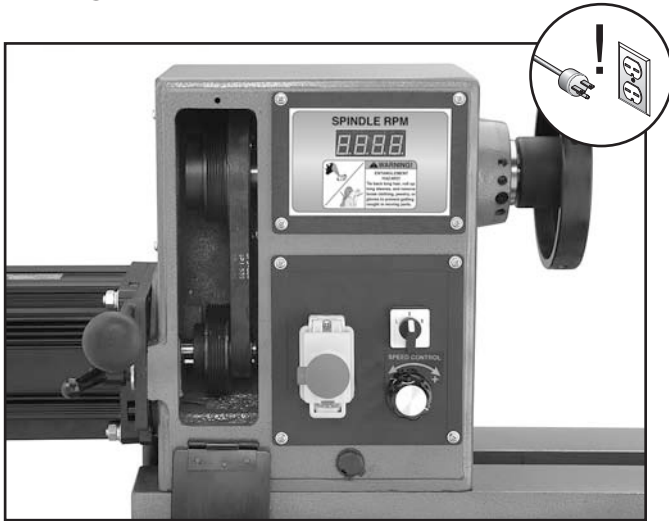




# Changing Belt

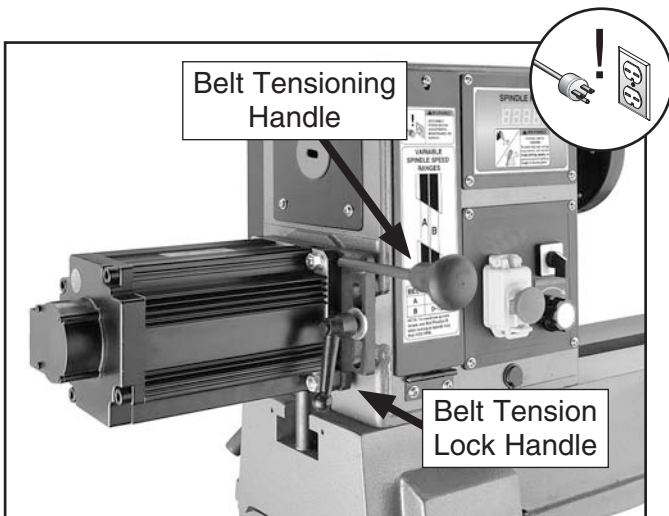
## To change the belt:

1. DISCONNECT LATHE FROM POWER!
2. Open the front belt access panel, as shown in **Figure 60**.



**Figure 60.** Belt access panel removed.

3. Loosen the belt tension lock handle shown in **Figure 61**.



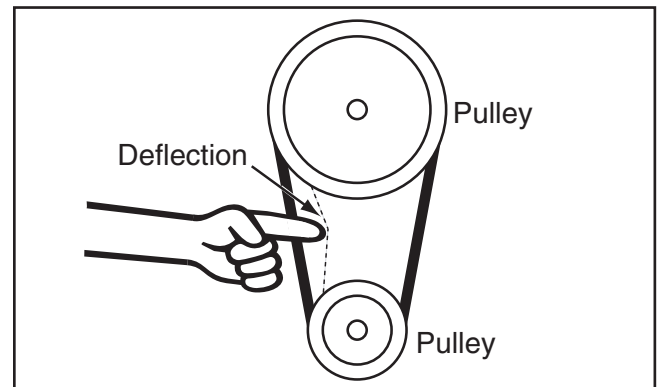
**Figure 61.** Belt tensioning handle and tension lock handle.

4. Use the belt tensioning handle (**Figure 61**) to lift the motor assembly all the way up, then re-tighten the motor tension lock handle—this will hold the motor in place while you change the belt position.
5. Reach into the belt access cavity and roll the belt off the motor (lower) pulleys, then pull the belt off the spindle pulleys and out the side of the headstock.

**Note:** Removing the plastic cover on the left side may aid in the belt removal and installation.

6. Install the new belt by reversing **Step 5**.
7. Apply downward pressure on the belt tensioning handle to properly tension the drive belt, then re-tighten the belt tension lock handle.

**Note:** When properly tensioned, the belt should deflect about  $\frac{1}{8}$ " when moderate pressure is applied to the belt mid-way between the upper and lower pulley, as illustrated in **Figure 32**.



**Figure 62.** Testing for  $\frac{1}{8}$ " belt deflection.

8. Ensure the belt ribs are fully seated in the pulley grooves then close the front belt access panel.



# SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this section carefully. If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine.

## **WARNING** Wiring Safety Instructions

**SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

**MODIFICATIONS.** Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

**WIRE CONNECTIONS.** All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

**CIRCUIT REQUIREMENTS.** You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

**WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

**MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.
















**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

**EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

### NOTICE

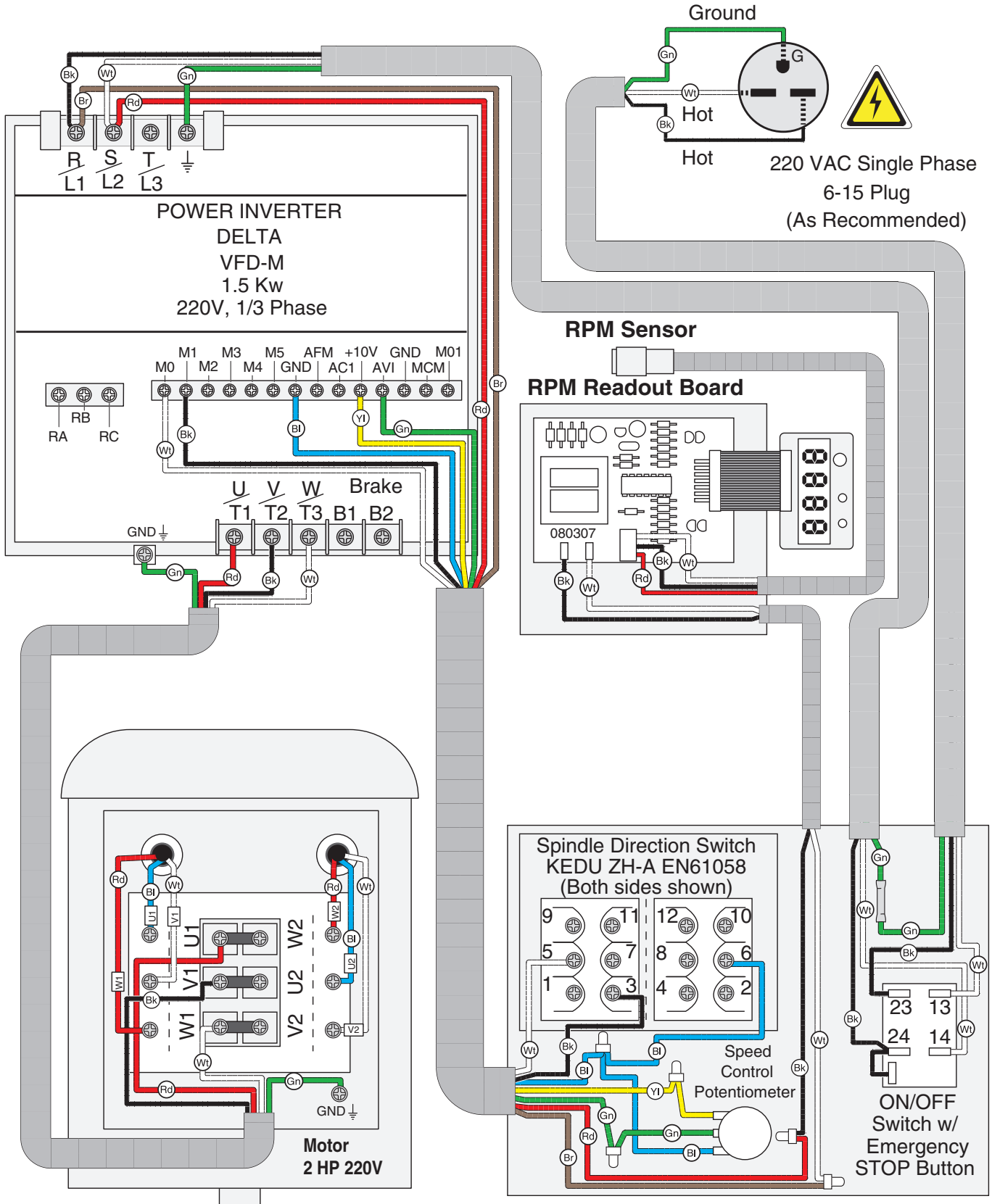
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at [www.grizzly.com](http://www.grizzly.com).

### COLOR KEY

BLACK 	BLUE 	YELLOW 	LIGHT BLUE 
WHITE 	BROWN 	YELLOW GREEN 	BLUE WHITE 
GREEN 	GRAY 	PURPLE 	TURQUOISE 
RED 	ORANGE 	PINK 	



# Wiring Diagram



# Wiring Components



Figure 63. Inverter box and motor box locations.

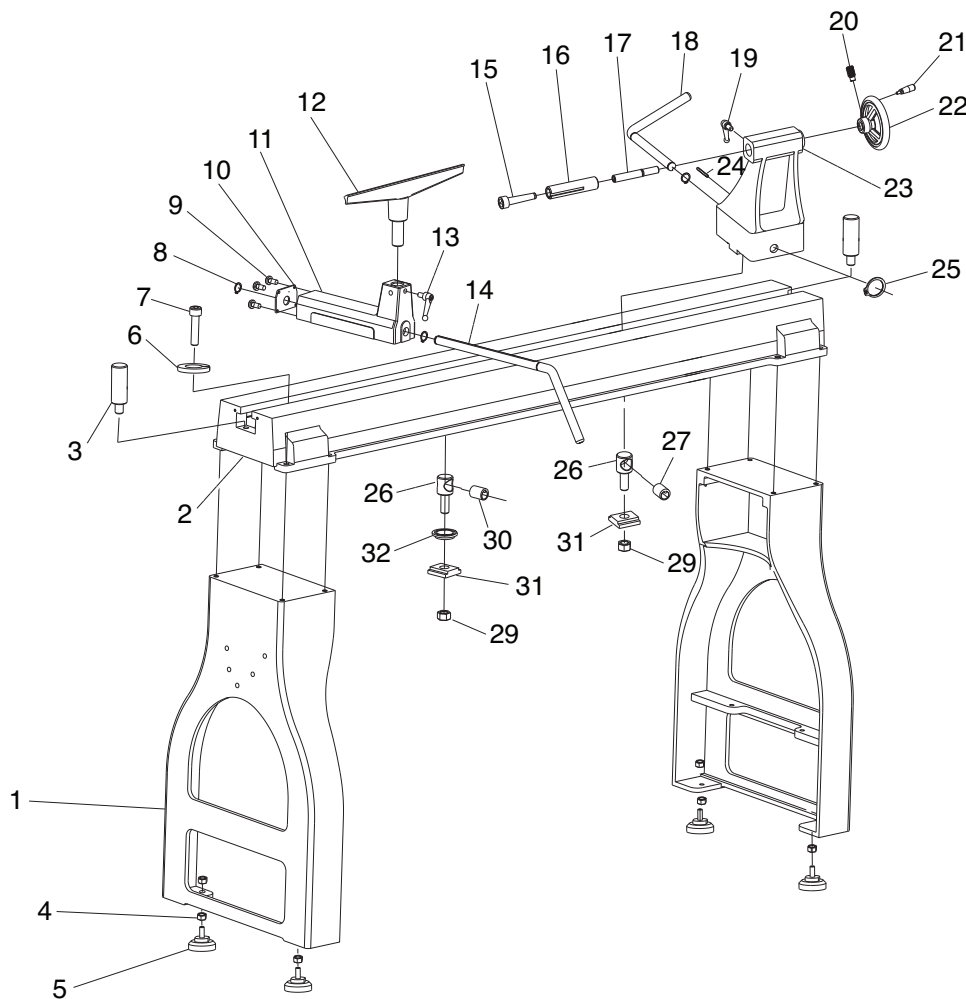


Figure 60. RPM readout display board and control panel wiring.



# SECTION 9: PARTS

## Stand & Bed Parts Breakdown



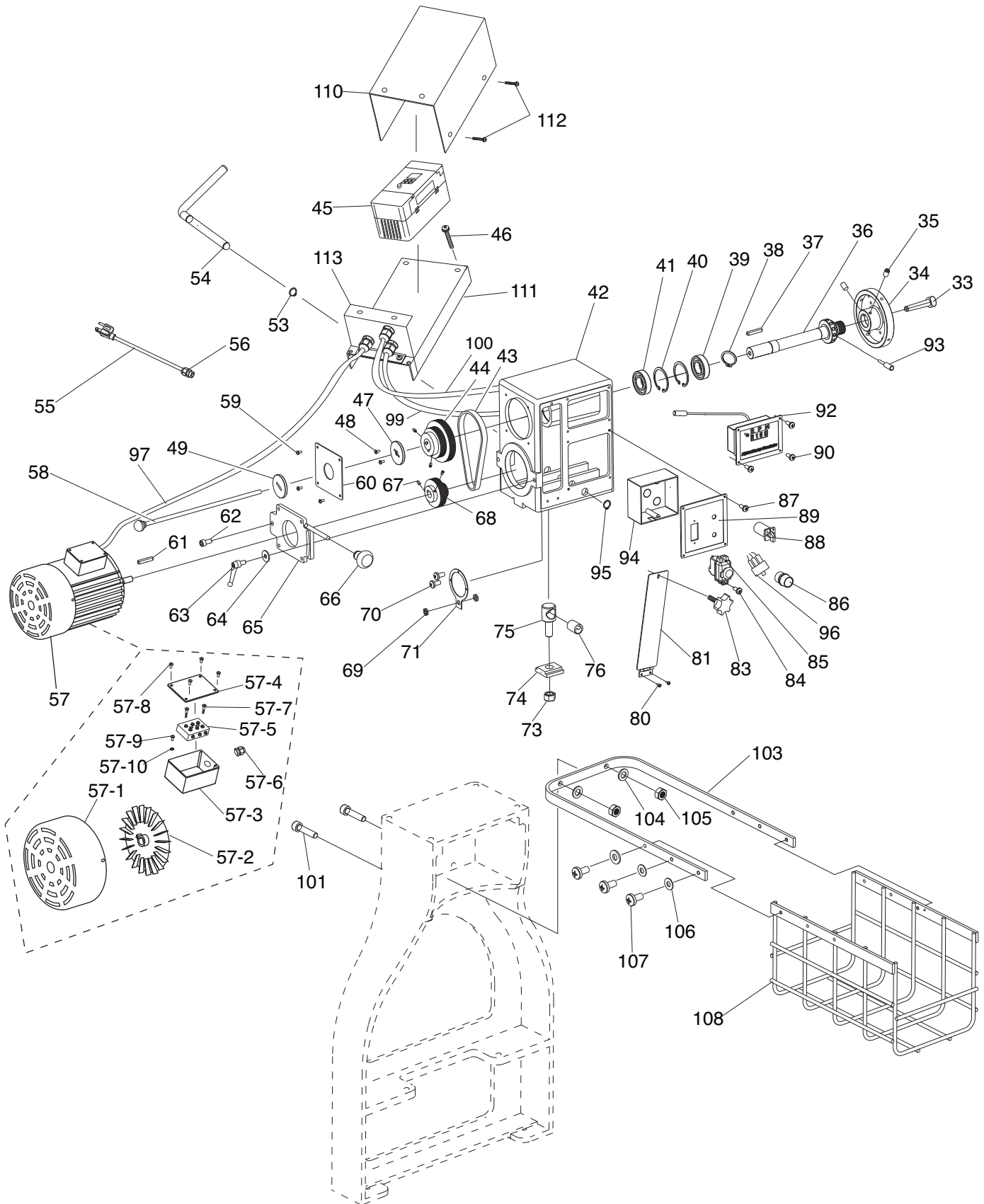
## Stand & Bed Parts List

REF	PART #	DESCRIPTION
1	P0698001	STAND
2	P0733002	BED
3	P0698003	BED STOP
4	PN08M	HEX NUT M10-1.25
5	P0698005	FOOT
6	PW04M	FLAT WASHER 10MM
7	PCAP84M	CAP SCREW M10-1.5 X 35
8	PR08M	EXT RETAINING RING 19MM
9	PCAP50M	CAP SCREW M5-.8 X 10
10	P0698010	TOOL REST BASE PLATE
11	P0698011	TOOL REST BASE
12	P0698012	TOOL REST
13	P0698013	TOOL REST LOCK LEVER
14	P0698014	TOOL REST BASE LOCK LEVER
15	P0698015	LIVE CENTER
16	P0698016	QUILL

REF	PART #	DESCRIPTION
17	P0698017	LEADSCREW
18	P0698018	TAILSTOCK LOCK LEVER
19	P0698019	QUILL LOCK LEVER
20	PSS14M	SET SCREW M8-1.25 X 12
21	P0698021	HANDWHEEL HANDLE
22	P0698022	HANDWHEEL
23	P0698023	TAILSTOCK CASTING
24	PRP30M	ROLL PIN 5 X 50
25	PR08M	EXT RETAINING RING 19MM
26	P0698026	TAILSTOCK CLAMP BOLT
27	P0698027	ECCENTRIC BUSHING 19 X 26 X 33
29	PN29M	HEX NUT M18-2.5
30	P0698027	ECCENTRIC BUSHING 19 X 26 X 33
31	P0698031	CLAMP PLATE
32	P0698032	SUPPORT BRACKET



# Headstock Parts Breakdown



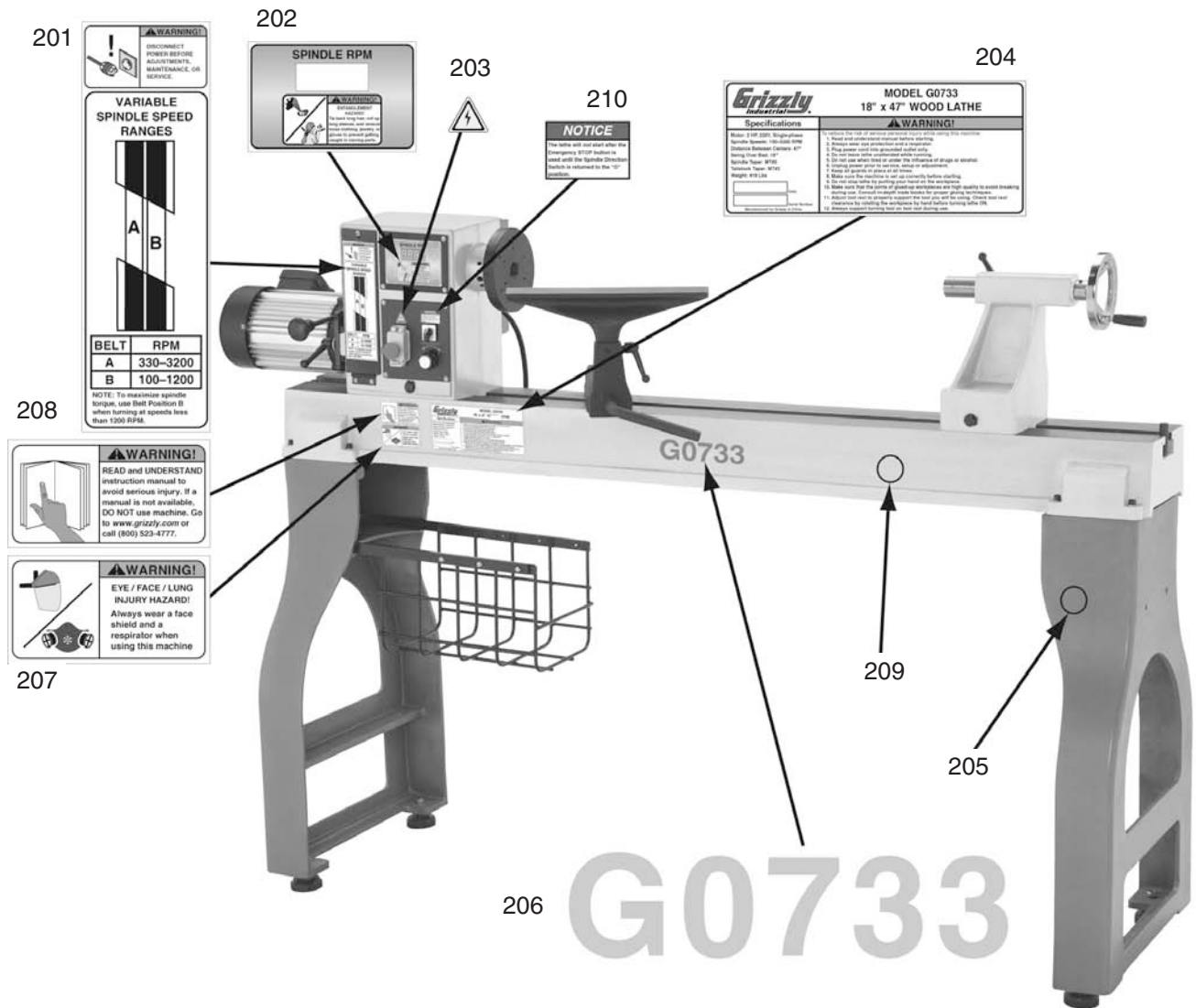
# Headstock Parts List

REF	PART #	DESCRIPTION
33	P0698033	SPUR CENTER
34	P0698034	FACEPLATE
35	PSS04M	SET SCREW M6-1 X 12
36	P0698036	SPINDLE
37	PK153M	KEY 8 X 7 X 45
38	PR15M	EXT RETAINING RING 30MM
39	P6206ZZ	BALL BEARING 6206ZZ
40	PR38M	INT RETAINING RING 62MM
41	P6206ZZ	BALL BEARING 6206ZZ
42	P0698042	HEADSTOCK CASTING
43	P0698043	RIBBED V-BELT 530J6
44	P0698044	SPINDLE PULLEY
45	P0733045	INVERTER DELTA VFD015M21A
46	PS54M	PHLP HD SCR M5-.8 X 45
47	P0698047	SPINDLE COVER
48	PSS53M	SET SCREW M5-.8 X 12
49	P0698049	SPINDLE ACCESS COVER
53	PR08M	EXT RETAINING RING 19MM
54	P0698054	HEADSTOCK LOCK LEVER
55	P0698055	POWER CORD 14G 3W 72" 6-15
56	P0698056	STRAIGHT STRAIN RELIEF 3/8"
57	P0733057	MOTOR 2HP 220V 3PH
57-1	P0733057-1	MOTOR FAN COVER
57-2	P0733057-2	MOTOR FAN
57-3	P0733057-3	MOTOR TERMINAL BOX
57-4	P0733057-4	MOTOR TERMINAL BOX COVER
57-5	P0733057-5	MOTOR TERMINAL
57-6	P0698056	STRAIGHT STRAIN RELIEF 3/8"
57-7	PS52M	PHLP HD SCR M4-.7 X 20
57-8	PHTEK21M	TAP SCREW M2 X 10
57-9	PS38M	PHLP HD SCR M4-.7 X 10
57-10	PTLW01M	EXT TOOTH WASHER 4MM
58	P0698058	KNOCKOUT ROD
59	PS08M	PHLP HD SCR M5-.8 X 12
60	P0698060	SPINDLE PULLEY COVER
61	PK44M	KEY 6 X 6 X 50
62	PCAP72M	CAP SCREW M10-1.5 X 30
63	P0698063	BELT TENSION LOCK LEVER
64	PW04M	FLAT WASHER 10MM
65	P0698065	MOTOR PLATE

REF	PART #	DESCRIPTION
66	P0698066	KNOB M10-1.5
67	PSS04M	SET SCREW M6-1 X 12
68	P0698068	MOTOR PULLEY
69	P0698069	HEX NUT M12-1 THIN
70	PS07M	PHLP HD SCR M4-.7 X 8
71	P0698071	RPM SENSOR BRACKET
73	PN29M	HEX NUT M18-2.5
74	P0698074	HEADSTOCK CLAMP
75	P0698075	HEADSTOCK CLAMP BOLT
76	P0698027	ECCENTRIC BUSHING 19 X 26 X 33
80	PS08M	PHLP HD SCR M5-.8 X 12
81	P0698081	BELT DOOR
83	P0733083	KNOB BOLT M5-.8 X 12
84	PS38M	PHLP HD SCR M4-.7 X 10
85	P0698085	ON/OFF SWITCH KEDU KJD17B GF
86	P0698086	VARIABLE SPEED DIAL
87	PS38M	PHLP HD SCR M4-.7 X 10
88	P0698088	FWD/REW SWITCH KEDU ZH-A
89	P0698089	PANEL COVER
90	PS38M	PHLP HD SCR M4-.7 X 10
92	P0733092	RPM DIGITAL READOUT W/SENSOR
93	P0698093	SPINDLE LOCK TOOL
94	P0698094	SWITCH BOX
95	PR08M	EXT RETAINING RING 19MM
96	P0698096	POTENTIOMETER WX110(010)
97	P0698097	MOTOR CORD 16G 4W 24"
99	P0698099	SPINDLE CORD 16G 7W 18"
100	P0698100	SWITCH CORD 16G 3W 18"
101	PCAP40M	CAP SCREW M8-1.25 X 35
103	P0698103	BASKET BRACKET
104	PLW04M	LOCK WASHER 8MM
105	PN03M	HEX NUT M8-1.25
106	PLW03M	LOCK WASHER 6MM
107	PS14M	PHLP HD SCR M6-1 X 12
108	P0698108	STORAGE BASKET
110	P0733110	INVERTER COVER
111	P0733111	INVERTER MOUNTING BRACKET
112	PS38M	PHLP HD SCR M4-.7 X 10
113	P0733113	TERMINAL PLATE



# Label Placement



REF	PART #	DESCRIPTION
201	P0698201	BELT COVER LABEL
202	P0698202	READOUT LABEL
203	PLABEL-14B	ELECRICITY WARNING
204	P0733204	MACHINE ID LABEL
205	PPAINT-1	GRIZZLY GREEN PAINT

REF	PART #	DESCRIPTION
206	P0733206	MODEL NUMBER LABEL
207	PLABEL-56C	EYE/FACE/LUNG HAZARD LABEL
208	PLABEL-12D	READ MANUAL LABEL
209	PPAINT-11	GRIZZLY PUTTY PAINT
210	P0733210	NOTICE LABEL

**⚠ WARNING**

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or [www.grizzly.com](http://www.grizzly.com).







# WARRANTY CARD

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<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
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<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
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<input type="checkbox"/> \$50,000-\$59,000	<input type="checkbox"/> \$60,000-\$69,000	<input type="checkbox"/> \$70,000+
- What is your age group?
 

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<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-69	<input type="checkbox"/> 70+
- How long have you been a woodworker/metalworker?
 

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------------------------------------	------------------------------------	-------------------------------------	------------------------------------
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# WARRANTY AND RETURNS

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Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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